



3240 N.W. 29TH AV
PORTLAND, OR.

ORIGINAL

JOB NAME

DATE ENTERED	9/2/10/21
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CUSTOMER'S ORDER NO. & DATE
B4165

SHIP CODE	12
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CUSTOMER NO. 455

S.D. CONTROL NO.	36017 - 000
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FOSS MARITIME
ATTN: ACCOUNTS PAYABLE
P.O. BOX 41018

* 118

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WILL CALL
3240 N.W. 29TH AV
PORTLAND, OR.

97210

SOURCE X

ORDER TAKEN BY
FORPFE

TAX EXEMPT

P.P./U.P.S. ZONE

TERMS O/R

WILL CALL

OUR TRUCK

OTHER	
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R-Q-A

BRANCH

SALESMAN	
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PAGE

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SHIPPED FROM/VIA	WALLING
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PPD

PPD, CHG

COLL	
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SHIPPING OR B/L NO.

JOB NO.

[illegible]

DELIVERY RECEIPT

SHIPPING DETAILS: NO. OF BOXES, CARTON, ETC.

ORDER WEIGHT 10.34

SHIP WEIGHT _____

CUSTOMER'S SIGNATURE

TITLE

DATE _____

NOTWITHSTANDING ANY INCONSISTENT, ADDITIONAL OR DIFFERENT
TERMS CONTAINED IN YOUR PURCHASE ORDER OR OTHER DOCUMENTS
SUPPLIED BY YOU, THIS SALE IS EXPRESSLY CONDITIONED UPON YOUR
AGREEMENT TO THESE TERMS AND CONDITIONS ABOVE AND ON THE

NO. 6536467



PACIFIC NORTHWEST SERVICES, INC.
*Convenience Store & Petroleum
Design & Construction*

November 16, 1998

Foss Maritime
Attn: Rafael Caballero
9030 N. W. St. Helens Rd.
Portland, OR 97231

RE: D.E.Q. PAPERWORK

Dear Rafael:

Enclosed, please find the following forms that will serve as documentation that you have fulfilled 1998 E.P.A. requirements for the decommissioning and installation completed by Pacific Northwest Services, Inc. at your facility:

D.E.Q. Installation Checklist
D.E.Q. Decommissioning / Service Change Report
D.E.Q. Decommissioning Report

Please take a moment to review these documents, fill out all of the highlighted areas and forward them to D.E.Q. at the address I have highlighted. (P.N.S. has not sent this document in since it requires "owner action".) Remember to retain copies of the completed documents for your records. The D.E.Q. requires that these documents be made available, upon request by the Department, for a minimum of three years. I would encourage you to keep copies at the site.

Feel free to call us if you have any questions regarding these documents.

Sincerely,

Laura Walters
Admin. Asst.

Encs.

UNDERGROUND STORAGE TANK PROGRAM
DECOMMISSIONING TANK STATUS
FOR HOLDERS OF TEMPORARY UST PERMITS

TO PERMITTEE:

Raphael Caballero
Foss Maritime Company
9030 NW St. Helens Road
PO Box 83018
Portland, OR 97283-0018

FOR EXISTING FACILITY:

Facility ID Number: 7374
KNAPPTON CORPORATION
9030 NW ST HELENS RD
PORTLAND, OR 97203

DEQ records indicate the following tanks have not been upgraded to meet one or more of the 1998 technical standards for corrosion control, spill and overfill prevention and leak detection and must be decommissioned in accordance with OAR 340-150-0166 prior to December 22, 1998. Tanks that do not meet the 1998 technical standards by December 22, 1998 must permanently close as of that date or, at a minimum, elect the temporary closure option which requires permanent decommissioning no later than December 22, 1999. Instructions on how to comply with the general permit to decommission conditions and requirements, including temporary and permanent closure or change-in-service, will be mailed to you in late December 1998.

IF INFORMATION ON YOUR TANK STATUS IS CORRECT (i.e. the following tanks do not, or will not meet the 1998 technical standards for corrosion control, spill and overfill prevention and leak detection by December 22, 1998) **DO NOT RETURN THIS FORM.** You will be receiving further instructions about decommissioning these tanks in late December 1998.

IF OUR INFORMATION IS INCORRECT AND YOU DO INTEND TO OPERATE ONE OR MORE OF THE FOLLOWING TANKS on or after December 23, 1998, **PLEASE COMPLETE PAGE 2, THE GENERAL PERMIT REGISTRATION FORM TO OPERATE.** For any tanks listed below, just transfer the Tank ID Number and Tank Permit Number to page 2 and describe the facts pertaining to the installation, upgrading or retrofitting of the subject tanks. If necessary, please make extra copies of page 2 to register more tanks. Both the permittee and tank owner must sign the operating registration form and return it to the Department of Environmental Quality, UST Program, 811 SW 6th Avenue, Portland, OR 97204.

TANKS TO BE DECOMMISSIONED

Tank ID Number	Tank Permit Number	Tank ID Number	Tank Permit Number	Tank ID Number	Tank Permit Number
1	AEFG	2	AEFH	3	AEFJ
4	AE GK	5	AE GA		

Oregon Department of Environmental Quality
UNDERGROUND STORAGE TANK DECOMMISSIONING/SERVICE CHANGE REPORT

DEQ FACILITY NUMBER: 7374 DATE: 11/12/98
FACILITY NAME: Foss Maritime
FACILITY ADDRESS: 9030 St Helens Rd
PHONE: (503) 286-0631

The following information **MUST** be submitted by the underground storage tank owner, operator or licensed DEQ Supervisor within 30 days following completion of the tank decommissioning or changing tank contents to a non-regulated substance. (OAR 340-150-001 through -150).

The attached supplemental checklist should be prepared by the person performing the decommissioning or service change. The checklist should be provided to DEQ and the tank owner to demonstrate that all required practices were followed.

Ordinarily the checklist is filled out by the DEQ licensed Service Provider or Supervisor. Owners who wish to personally decommission a tank or change service must follow all DEQ and other applicable standards. The owner should contact the DEQ Regional Office prior to starting the work to receive current copies of underground storage tank regulations.

A. DATES:

Decommissioning/Service Change Notice - Date Submitted: 9/14/98 (30 days before work starts).

Work Start Telephone Notice - Date Submitted: 10/14/98 (3 working days before work starts).

DEQ Person Notified: GREG TURAN

Date Work Started: 10/19/98 Date Work Completed: 10/21/98

Note: Provide the following information if any soil or water contamination is found during the decommissioning or service change. Contamination must be reported by the UST owner or operator within 24 hours. The licensed service provider must report contamination within 72 hours after discovery unless previously reported.

Date Contamination Reported: 10/19/98 By: Mark Kreving

DEQ Person Notified: GREG TURAN

Backfill Telephone Notice - Date Called: _____ (before backfilling).

DEQ Person Notified: _____

B. PERMITS: Note: DEQ permits may be needed where soil or water cleanup is required.

DEQ Water Discharge Permit #: _____ Date: _____

Disposed to (Location): _____

DEQ Solid Waste Disposal Permit #: _____ Date: _____

Soil Disposal or Treatment Location: _____

C. TANK INFORMATION:

TANK ID #	DEQ-UST PERMIT #	TANK SIZE IN (GALLONS)	PRODUCT: GASOLINE, DIESEL, USED OIL, OTHER?		CLOSURE OR SERVICE CHANGE?			TANK TO BE REPLACED?	
			PRESENT	NEW	TANK REMOVAL	CLOSURE • INPLACE	OTHER • USE	YES*	NO
#1		6000	Oil		✓				✓
#2		2000	Gas		✓				✓

- Where decommissioned tank(s) are replaced by new underground storage tanks the UST owner or operator must submit a new permit application containing information on the new tanks 30 days before placing them in service.
- Submit a soil sampling plan to the DEQ regional office and receive plan approval prior to starting work if 1) tank is to be decommissioned in-place, 2) tank contents are changed to a non-regulated substance, 3) tank contains a regulated substance other than petroleum, or 4) tank changed to non-regulated use.

D. DISPOSAL INFORMATION:

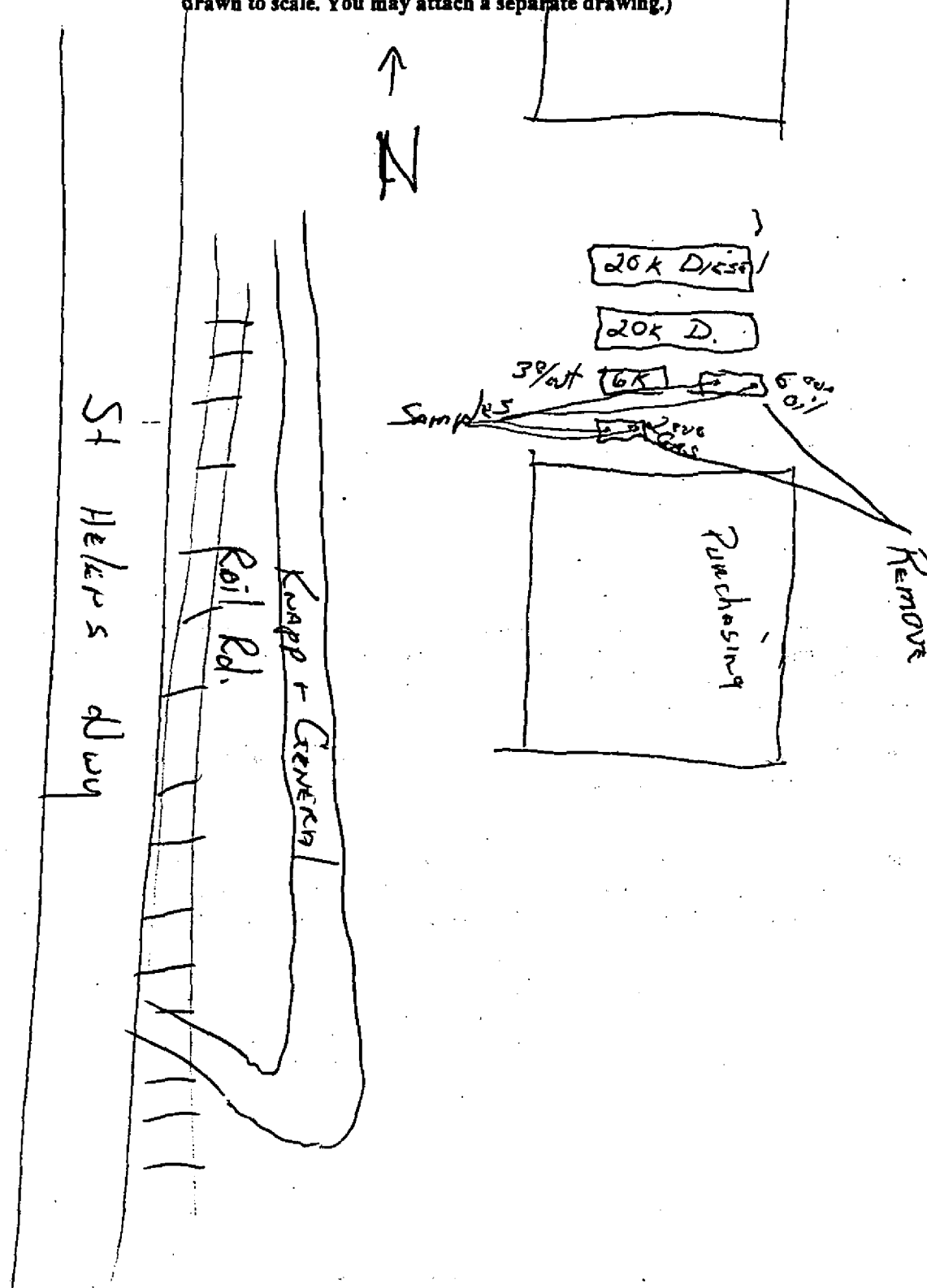
TANK AND PIPING DISPOSAL METHOD					DISPOSAL LOCATION OF TANK CONTENTS	
TANK ID #	SCRAP	LAND-FILL	OTHER	IDENTIFY LOCATION & PROPERTY OWNER	LIQUIDS *	SLUDGES *
#1	✓			9030 St Neles Rd. Foss Maritime	Oil Refining	Oil Refining
#2	✓			" "	" "	" "

* Note: The tank contents, the tank and the piping may be subject to the requirements of Hazardous Waste regulations. If you have questions, contact the DEQ regional office for your area.

E. CONTAMINATION INFORMATION: * Note: Sampling is required if groundwater is encountered. See cleanup rules.

TANK ID #	GROUND * WATER IN PIT?	PRODUCT ODOR IN SOIL?	PRODUCT STAINS IN SOIL?	NUMBER OF SAMPLES	LABORATORY (NAME, CITY, STATE, PHONE)
#1	NO	NO	NO	2	Wy East
#2	"	"	"	2	" "

F. SITE SKETCH: (Show location of adjacent roads, property lines, structures, dispenser, & all USTs) (Show North, general direction of ground slope and soil sample locations. Sketch does not need to be drawn to scale. You may attach a separate drawing.)



G. WORK PERFORMED BY:

DEQ Service Provider's License #: 15034 Construction Contractors License #: 0119654

Name: Pacific Northwest Services, Inc

Telephone: (360) 425-6955

DEQ Decommissioning Supervisor's License #: 11561

Name: Garrett Hale

Telephone: 360-425-6955

DEQ Soil Matrix Service Provider's License #: _____ (If applicable)

Name: _____

Telephone: _____

DEQ Soil Matrix Supervisor's License #: _____ (If applicable)

Name: _____

Telephone: _____

H. ATTACHMENTS TO THIS REPORT:

1. Attach a copy of the laboratory report showing the results of all tests on all soil and water samples. The laboratory report must identify sample collection methods, sample location, sample depth, sample type (soil or water), type of sample container, sample temperature during transportation, types of tests, and copies of analytical laboratory reports, including QA/QC information. Include laboratory name, address and copies of chain-of-custody forms.

2. If contamination is detected and a Level 2 or Level 3 soil matrix cleanup standard is selected attach a copy of the soil matrix analysis for the site including methods of determining soil type, depth to groundwater, and sensitivity of uppermost aquifer.

I. REPORT FILING:

This report, signed by the tank owner or operator, complete with all applicable attachments must be filed with the DEQ regional office within 30 days after the excavation is backfilled or change-in-service is complete. Contact the DEQ regional office prior to filing this report where special circumstances exist at the site (such as water in pit, remaining pockets of contamination, etc.).

NORTHWEST REGION
Phone: Portland (503) 229-5263

EASTERN REGION / PENDLETON
Phone: Pendleton (541) 276-4063

WESTERN REGION / MEDFORD
Phone: Medford (541) 776-6136, Ext. 233

EASTERN REGION / THE DALLES
Phone: The Dalles (541) 298-7255

WESTERN REGION / SALEM
750 Front Street NE Suite 120
Salem, OR 97310

WESTERN REGION / EUGENE
Phone: Eugene (541) 686-7838

EASTERN REGION / BEND
Phone: Bend (541) 388-6146

Phone: Salem (503) 378-8240

NOTE: If contamination was found during site assessment at decommissioning or change-in-service and reported to the appropriate DEQ regional office, this report may be submitted with either the first interim cleanup report or the final cleanup report, whichever is first.

I have personally reviewed this report and the attachments and find them to be true and complete.

Signature: Rafael A. Caballero Date: 12/18/98
(Owner or Operator)

For information: (503) 229-5733 or Toll Free in Oregon UST HELPLINE 1-800-742-7878

LABORATORY REPORT

Pacific Northwest Services
P.O.Box 1579
Longview WA 98632

PROJECT NAME/SITE: Foss Portland REPORT NUMBER: 24145
PROJECT NUMBER: 1096 Foss REPORT DATE: 11-2-98
EXTRACTION DATE: 10-29-98 to 10-30-98 PAGES: 1 of 1

OREGON DEQ TPH-HCID

Analyte: Petroleum Hydrocarbon Identification (Gasoline, Petroleum, Heavy Oil)

Field ID	Lab ID	Identification			Surrogate Recovery (%)
		Gasoline	Diesel	Heavy Oil	
SP2	A512	ND	Detected	ND	*
BLANK	-	ND	ND	ND	-
Reporting Limits (mg/Kg)		20	50	50	-

* Surrogate peak not discernible on chromatogram from analyte peak

Surrogate is Chlorooctane

ND = Not Detected (below reporting limit or detection limit)

OREGON DEQ TPH-D

Analyte: Diesel Range Hydrocarbons Quantification for soil

Field ID	Lab ID	mg/Kg (ppm)	Surrogate Recovery (%)
SP2	A512	13,900	*
BLANK	-	ND	-
Reporting Limit		20	-

* Surrogate peak not discernible on chromatogram from analyte peak

Surrogate is o-Terphenyl

ND = Not Detected (below reporting limit or detection limit)

LABORATORY REPORT

Pacific Northwest Services
P.O.Box 1579
Longview WA 98632

PROJECT NAME/SITE: Foss Maritime
PROJECT NUMBER: 1096
EXTRACTION DATE: 10-15-98

REPORT NUMBER: 24010
REPORT DATE: 10-16-98
PAGES: 1 of 1

OREGON DEQ TPH-HCID

Analyte: Petroleum Hydrocarbon Identification (Gasoline, Petroleum, Heavy Oil)

Field ID	Lab ID	Identification			Surrogate Recovery (%)
		Gasoline	Diesel	Heavy Oil	
1 E	A178	ND	ND	ND	103
1 W	A179	ND	ND	ND	97
2 E	A180	ND	ND	ND	92
2 W	A181	ND	ND	ND	97
SP 1	A182	ND	ND	ND	94
BLANK	-	ND	ND	ND	-
Reporting Limits (mg/Kg)	-	20	50	50	-

Surrogate is Chlorooctane

ND = Not Detected (below reporting limit or detection limit)

Oregon Department of Environmental Quality
UNDERGROUND STORAGE TANK DECOMMISSIONING CHECKLIST

DEQ FACILITY NUMBER: 7374

DATE: 9/10/98

FACILITY NAME: Foss Maritime

FACILITY ADDRESS: 9030 NW St Helens Rd

PHONE: (503) 286-0631

A. SAFETY EQUIPMENT ON JOB SITE:

Fire Extinguisher: Type/Size: 20# ABC Recharge Date: _____

Combustible Gas Detector: Model: GAS TECH Calibration Date: _____

Oxygen Analyzer: Model: _____ Calibration Date: _____

B. DECOMMISSIONING: All Tanks: N/A = Not Applicable
Check (✓) Appropriate Box

1. All electrical equipment grounded and explosion proof?
2. Safety equipment on job site?
3. Overhead electrical lines located?
4. Subsurface electrical lines off or disconnected?
5. Natural gas lines off or disconnected?
6. No open fires or smoking material in area?
7. Vehicle and pedestrian traffic controlled?
8. Excavation material area cleared?
9. Rainwater runoff directed to treatment area?
10. Drained and collected product from lines?
11. Removed product and residual from tank?
12. Cleaned tank?
13. Excavated to top of tank?
14. Removed tank fixtures? (pumps, leak detection equipment)
15. Removed product, fill and vent lines?

YES	NO	UNKNOWN	N/A
✓			
✓			
✓			
✓			
✓			
✓			
✓			
			✓
✓			
✓			
✓			
✓			
✓			
✓			
✓			

C. TANK ABANDONMENT IN-PLACE:

16. Sampling plan approved by DEQ?
Date: _____ DEQ Staff: _____

--	--	--	--

D. DECOMMISSIONING: All Tanks: N/A = Not Applicable
Check (✓) Appropriate Box

17. Contamination concerns fully resolved?

18. Fill Material?

Type

N/A

E. TANK REMOVAL:

19. Tank placement area cleared, chocks placed?

20. Purged or ventilated tank to prevent explosion?

Method used:

CO₂

Meter reading:

0.4

21. No chains or steel cables wrapped around tank for removal?

22. Tank removed, set on ground, blocked to prevent movement?

23. Tank set on truck and secured with straps(s)?

24. Tank labeled before leaving site?

F. SITE ASSESSMENT:

25. Site assessed for contamination? See OAR 340-122-340 OVER Fill on
up graded TANKS

26. Soil samples taken and analyzed?

20K DIESELS

27. Decommissioning/Change-in-Service report sent to DEQ?

28. Was contamination found? Date/Time:

10/15/98

29. Was contamination reported to DEQ?

By:

Mark Keeney

Date/Time:

10/19/98

10:55

DEQ Staff:

GREG TURNER

30. Was hazardous waste determination made for tank contents (Liquids/sludges)?

31. Disposal location of tank(s) contents.

Name:

Oil Refining

Address:

Date:

32. Disposal or recycling location of removed tank(s) and associated piping.

Name:

Shitzer Steel

Address:

Attach disposal receipt.

Date:

Attach disposal receipt.

33. If tank(s) are intended to be reused, identify new tank site.

Name:

N/A

Address:

Date:

Purpose of Reuse:

YES	NO	UNKNOWN	N/A
✓			✓
			✓

✓			
✓			
✓			
✓			
✓			
✓			

✓			
✓			
✓			
✓			

G. WORK PERFORMED BY:

DEQ Service Provider's License #:

Name:

Telephone:

DEQ Decommissioning Supervisor's License #:

Name:

Telephone:

H. CHECKLIST FILING:

1. Provide copy of checklist to the UST owner and operator.
2. Send completed checklist to the DEQ regional office for your area within 30 days after the excavation is backfilled.

NOTE: If contamination was found during decommissioning and reported to the appropriate DEQ regional office, this report may be submitted with either the first interim cleanup report or the final cleanup report, whichever is first.

RETURN COMPLETED AND SIGNED FORM TO THE DEPARTMENT OF ENVIRONMENTAL
QUALITY UST PROGRAM REGIONAL OFFICE IN WHICH YOUR FACILITY IS LOCATED.

NORTHWEST REGION
2020 SW 4TH AVENUE
SUITE 400
PORTLAND, OR 97201-5884
FAX (503) 229-5471

WESTERN REGION / SALEM
750 FRONT STREET NE
SUITE 120
SALEM, OR 97310
FAX (503) 373-7944

WESTERN REGION / MEDFORD
201 W MAIN STREET
SUITE 2-D
MEDFORD, OR 97501
FAX (541) 776-6262

WESTERN REGION / EUGENE
1102 LINCOLN STREET
SUITE 210
EUGENE, OR 97401
FAX (541) 686-7551

EASTERN REGION / THE DALLES
400 E SCENIC DRIVE
307
THE DALLES, OR 97058
FAX (541) 298-7330

EASTERN REGION / PENDLETON
700 SE EMIGRANT
SUITE 330
PENDLETON, OR 97801
FAX (541) 278-0168

EASTERN REGION / BEND
2146 NE 4TH
104
BEND, OR 97701
FAX (541) 388-8283

I have personally reviewed this decommissioning checklist and find it to be true and complete.

Signature:

(Licensed Supervisor)

Date:

Signature:

(Owner or Operator)

Date:

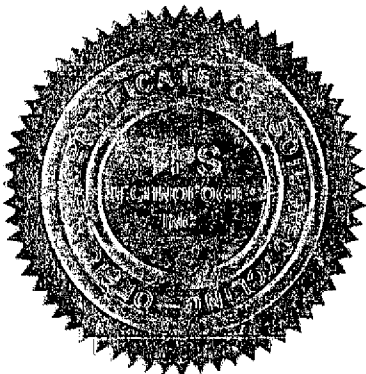
For information: (503) 229-5733 or Toll Free in Oregon UST HELPLINE 1-800-742-7878

Soil Recycling Certificate

TPS Technologies Inc. does hereby certify
that 21.79 tons of petroleum - contaminated soil
received from

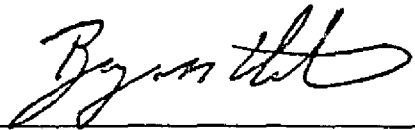
Foss Maritime
Pacific Northwest Services - Consultant
9030 Northwest St. Helen Road
Portland, OR 97231

Under Manifest/authorization number 09-03274
have been properly recycled to approved regulatory standards
at our Soil Recycling Facility in Portland, Oregon



Dated this 9th day of November, 19 98

Sworn and Attested by:
TPS Technologies Inc.

By: 



Oregon

John A. Kitzhaber, M.D., Governor

98214
Department of Environmental Quality

Western Region
Salem Office
750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

Oregon Department of Environmental Quality

UNDERGROUND STORAGE TANK - UPGRADE / RETROFIT CHECKLIST

This checklist must be filled out by the DEQ licensed supervisor and submitted as part of the upgrade/retrofit record in accordance with OAR Chapter 340, Divisions 150 and 160. A system upgrade/retrofit must be inspected a minimum of three times and all of the requested information provided to the DEQ. This form may be used by DEQ inspectors for oversight purposes. The DEQ licensed UST Service Provider must have a DEQ licensed Supervisor(s) on site during all upgrade/retrofit operations and activities. This checklist must be signed by an executive officer of the UST Service Provider firm and by the licensed UST Supervisor(s).


The purpose of this form is to certify the proper upgrading and retrofitting of underground storage tank (UST) systems. It will also be used to record any changes to information previously provided on the 30-day upgrade/retrofit notification form. The owner/operator must sign the upgrade certification statement on page 6.

Using this checklist, upgrades/retrofits or installations of cathodic protection (CP) systems should be separately certified by a DEQ licensed CP Supervisor. All required tank and line tightness testing required at the completion of upgrades/retrofits or repairs should be separately certified by a DEQ licensed Tightness Testing Supervisor.

Activities conducted at one UST facility may be reported together by completing pages 1, 5, and 6 only once for the entire facility. However, a separate checklist (pages 2, 3, and 4) must be completed for each UST system (tank and associated piping) where upgrading/retrofitting activities are conducted. The completed form should be mailed to the appropriate DEQ Regional Office within 30 days of completion of the facility upgrade/retrofit.

For information regarding the use or completion of this form, please contact the appropriate DEQ Regional UST Program. Regional office address and telephone information is listed on the back of this page for your convenience.

**RETURN COMPLETED AND SIGNED FORM TO
THE DEPARTMENT OF ENVIRONMENTAL QUALITY UST PROGRAM
REGIONAL OFFICE IN WHICH YOUR FACILITY IS LOCATED**

 **NORTHWEST REGION**
2020 SW 4TH AVENUE, SUITE 400
PORTLAND, OR 97201-5884
FAX (503) 229-5471
Phone: (503) 229-5263

WESTERN REGION / SALEM
750 FRONT STREET NE, SUITE 120
SALEM, OR 97310
FAX (503) 373-7944
Phone: (503) 378-8240

WESTERN REGION / MEDFORD
201 W MAIN STREET, SUITE 2-D
MEDFORD, OR 97501
FAX (541) 776-6262
Phone: (541) 776-6136, Ext. 233

WESTERN REGION / EUGENE
1102 LINCOLN STREET, SUITE 210
EUGENE, OR 97401
FAX (541) 686-7551
Phone: (541) 686-7838

EASTERN REGION / THE DALLES
400 E SCENIC DRIVE, # 307
THE DALLES, OR 97058
FAX (541) 298-7330
Phone: (541) 298-7255

EASTERN REGION / PENDLETON
700 SE EMIGRANT, SUITE 330
PENDLETON, OR 97801
FAX (541) 278-0168
Phone: (541) 276-4063

EASTERN REGION / BEND
2146 NE 4TH, # 104
BEND, OR 97701
FAX (541) 388-8283
Phone: (541) 388-6146

UST HELPLINE: 1-800-742-7878
(Toll Free in Oregon)

Oregon Department of Environmental Quality

UNDERGROUND STORAGE TANK - UPGRADE / RETROFIT CHECKLIST

Activities conducted at one UST facility may be reported together by completing pages 1, 5, and 6 once for the entire facility.

1. UST SYSTEM OWNER AND LOCATION

DEQ Facility ID number:

7374

DEQ UST Facility Name:

Foss Maritime Co.

Facility (location) address:

9030 NW St. Helens Road
Portland, OR

UST owner/operator name:

Foss Maritime Co.

Owner/operator mailing address:

P.O. Box 83018
Portland, OR 97283

Owner/operator Telephone:

503-286-0631

2. TANK UPGRADE/RETROFIT PERFORMED BY:

Service Provider: Ulrich Ind. CoatingsDEQ License Number: 14319Address: P.O. Box 772Lic. Expiration Date: 1-24-99Hillsboro, OR 97123Telephone: 503-648-9587Licensed Supervisor: Patrick FogartyDEQ License Number: 15290Lic. Expiration Date: 4-8-99

Pages 2 through 4 of this checklist must be completed separately for each UST system (tank and associated piping) upgraded or retrofitted at the site. For more than one UST system you may photocopy this form prior to completing.

3. UST SYSTEM INFORMATION

- a. DEQ tank permit number (letters): AEFG b. Year installed: 1979
- c. Tank capacity in gallons: 20,000
- d. Tank material (check): ☒ steel ☐ fiberglass reinforced plastic (FRP)
☐ composite other (specify) _____
- e. Tank construction (check): ☒ single wall ☐ double wall ☐ partitioned

4. UPGRADE/RETROFIT INFORMATION

- a. Reason for upgrade/retrofit (check all that apply):
☒ to comply with 1998 upgrading requirements for existing UST systems
☐ to repair structural defects in tank(s)
☐ preventive maintenance
☐ to comply with corrective action requirements
☐ other (describe): _____
- b. Type of upgrade/retrofit (circle all that apply):
- * installation of internal lining:
rubber alkyd ☒ epoxy phenolic glass other (specify) _____
 - * installation of spill and overfill prevention equipment:
catchment basin auto shutoff overfill alarm ☒ ball float valve
☒ drop tube valve other (specify) spill buckets
sump sensors
INTS 1000 Incon Tank Monitor

* installation, upgrade/retrofit or repair of release detection equipment (check all that apply):

- ☒ automatic tank gauge
- ☒ vapor monitoring equipment
- ☐ groundwater monitoring equipment
- ☒ interstitial monitoring within secondary barrier
- ☐ interstitial monitoring within double wall
- ☒ automatic line leak detector
- ☐ other (specify) _____

* tank upgrade (describe if different from above): _____

cathodic protection

* replacement of metal pipe sections and fittings (indicate new piping material): _____

Environ (underground)
steel pipe (above ground)

* replacement of fiber glass pipe sections and fittings (indicate new piping material): _____

* other piping changes if applicable (describe): _____

Fiberglass vent lines

c. Date of completion of upgrade/retrofit indicated above: 10-21-98

5. CHECKLIST (Check YES or NO. Where a specific item is "not applicable" to the situation, please check the n/a box.)

	YES	NO	N/A
Was the DEQ Regional Office notified at least 30 days in advance of the planned project start date?	✓		
Was the DEQ Regional Office notified 72 hours in advance prior to beginning the upgrade/retrofit? If yes, indicate 3-day number issued: <u>26-3I-98-42</u>	✓		
Are the UST annual permit fees current?	✓		
Was external cathodic protection (CP) installed/upgraded or retrofitted?	✓		
Was a <u>separate</u> CP report submitted or attached? <u>to follow</u>	✓		
Was a CP test station installed?			✓
Is a 6-month CP follow-up inspection/test scheduled? Projected inspection date: _____			✓
Was a site assessment conducted?			✓
Was contamination, including simple overfill, encountered and was it reported to DEQ? If so, indicate DEQ LUST number issued: _____			✓
Were internal inspections of all USTs completed before lining began on any UST?	✓		
Have the results of the internal tank inspections been submitted to and/or discussed with DEQ?	✓	NO	
If there were holes in any of the USTs, has a SUSPECTED release been reported to DEQ? If yes, indicate date reported: _____	NO	✓ NO HOLES	
Was the system tight-tested before placing back into service?			✓
Do all tank and piping materials comply with 40 CFR 280.20 as modified by OAR Chapter 340, Division 150?			✓
Have all items checked above been installed, upgraded or retrofitted in accordance with all codes, manufacturer's requirements and federal and state regulations?	✓		
Has the UST system owner/operator been provided with written documentation of the item(s) installed, upgraded or retrofitted and has the owner/operator been instructed to preserve these records?	✓		

Pages 2 through 4 of this checklist must be completed separately for each UST system (tank and associated piping) upgraded or retrofitted at the site. For more than one UST system you may photocopy this form prior to completing.

3. UST SYSTEM INFORMATION

- a. DEQ tank permit number (letters): AEFH b. Year installed: 1979
- c. Tank capacity in gallons: 20,000
- d. Tank material (check): ☒ steel ☐ fiberglass reinforced plastic (FRP)
☐ composite other (specify) _____
- e. Tank construction (check): ☒ single wall ☐ double wall ☐ partitioned

4. UPGRADE/RETROFIT INFORMATION

- a. Reason for upgrade/retrofit (check all that apply):
☒ to comply with 1998 upgrading requirements for existing UST systems
☐ to repair structural defects in tank(s)
☐ preventive maintenance
☐ to comply with corrective action requirements
☐ other (describe): _____
- b. Type of upgrade/retrofit (circle all that apply):
- * installation of internal lining:
rubber alkyd ☒ epoxy phenolic glass other (specify) _____
- * installation of spill and overfill prevention equipment:
catchment basin auto shutoff overfill alarm ☒ ball float valve
drop tube valve other (specify) spill buckets
sump sensors
INTS 1000 Incon Tank Monitor

- * installation, upgrade/retrofit or repair of release detection equipment (check all that apply):

☒ automatic tank gauge
☒ vapor monitoring equipment
☐ groundwater monitoring equipment
☐ interstitial monitoring within secondary barrier
☐ interstitial monitoring within double wall
☒ automatic line leak detector
☐ other (specify) _____

- * tank upgrade (describe if different from above): _____

Cathodic protection

- * replacement of metal pipe sections and fittings (indicate new piping material): _____

Environ funderground)
steel pipe (above ground)

- * replacement of fiber glass pipe sections and fittings (indicate new piping material): _____

- * other piping changes if applicable (describe): _____

Fiberglass vent lines

c. Date of completion of upgrade/retrofit indicated above: 10-21-98

5. CHECKLIST (Check YES or NO. Where a specific item is "not applicable" to the situation, please check the n/a box.)

	YES	NO	N/A
Was the DEQ Regional Office notified at least 30 days in advance of the planned project start date?	✓		
Was the DEQ Regional Office notified 72 hours in advance prior to beginning the upgrade/retrofit? If yes, indicate 3-day number issued: <u>26-3I-98-42</u>	✓		
Are the UST annual permit fees current?	✓		
Was external cathodic protection (CP) installed/upgraded or retrofitted?	✓		
Was a <u>separate</u> CP report submitted or attached? <u>to follow</u>	✓		
Was a CP test station installed?			✓
Is a 6-month CP follow-up inspection/test scheduled?			✓
Projected inspection date: _____			✓
Was a site assessment conducted?			✓
Was contamination, including simple overflow, encountered and was it reported to DEQ? If so, indicate DEQ LUST number issued: _____			✓
Were internal inspections of all USTs completed before lining began on any UST?	✓		
Have the results of the internal tank inspections been submitted to and/or discussed with DEQ?	✓	NA	
If there were holes in any of the USTs, has a SUSPECTED release been reported to DEQ? If yes, indicate date reported: _____		✓	NO HOLES
Was the system tight-tested before placing back into service?			✓
Do all tank and piping materials comply with 40 CFR 280.20 as modified by OAR Chapter 340, Division 150?			✓
Have all items checked above been installed, upgraded or retrofitted in accordance with all codes, manufacturer's requirements and federal and state regulations?	✓		
Has the UST system owner/operator been provided with written documentation of the item(s) installed, upgraded or retrofitted and has the owner/operator been instructed to preserve these records?	✓		

Pages 2 through 4 of this checklist must be completed separately for each UST system (tank and associated piping) upgraded or retrofitted at the site. For more than one UST system you may photocopy this form prior to completing.

3. UST SYSTEM INFORMATION

- a. DEQ tank permit number (letters): AEFJ b. Year installed: 1979
- c. Tank capacity in gallons: 6,000
- d. Tank material (check): ☒ steel ☐ fiberglass reinforced plastic (FRP)
☐ composite other (specify) _____
- e. Tank construction (check): ☒ single wall ☐ double wall ☐ partitioned

4. UPGRADE/RETROFIT INFORMATION

- a. Reason for upgrade/retrofit (check all that apply):
☒ to comply with 1998 upgrading requirements for existing UST systems
☐ to repair structural defects in tank(s)
☐ preventive maintenance
☐ to comply with corrective action requirements
☐ other (describe): _____
- b. Type of upgrade/retrofit (circle all that apply):
- * installation of internal lining:
rubber alkyd ☒ epoxy phenolic glass other (specify) _____
 - * installation of spill and overfill prevention equipment:
catchment basin auto shutoff overfill alarm ☒ ball float valve
drop tube valve other (specify) spill buckets
sump sensors
INTS 1000 Incon Tank Monitor

- * installation, upgrade/retrofit or repair of release detection equipment (check all that apply):

☒ automatic tank gauge
☒ vapor monitoring equipment
☐ groundwater monitoring equipment
☐ interstitial monitoring within secondary barrier
☐ interstitial monitoring within double wall
☒ automatic line leak detector
☐ other (specify) _____

- * tank upgrade (describe if different from above): _____

cathodic Protection

- * replacement of metal pipe sections and fittings (indicate new piping material): _____

Environ (underground)

Steel pipe (above ground)

- * replacement of fiber glass pipe sections and fittings (indicate new piping material): _____

- * other piping changes if applicable (describe): _____

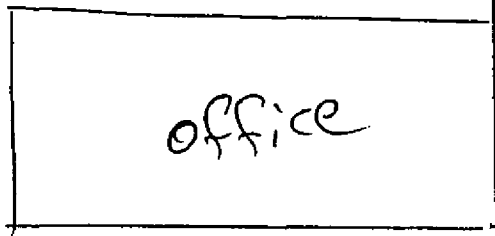
Fiberglass vent lines

c. Date of completion of upgrade/retrofit indicated above: 10-21-98

5. CHECKLIST (Check YES or NO. Where a specific item is "not applicable" to the situation, please check the n/a box.)

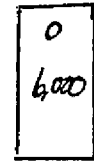
	YES	NO	N/A
Was the DEQ Regional Office notified at least 30 days in advance of the planned project start date?	✓		
Was the DEQ Regional Office notified 72 hours in advance prior to beginning the upgrade/retrofit? If yes, indicate 3-day number issued: <u>26-3I-98-42</u>	✓		
Are the UST annual permit fees current?	✓		
Was external cathodic protection (CP) installed/upgraded or retrofitted?	✓		
Was a <u>separate</u> CP report submitted or attached? <u>to follow</u>	✓		
Was a CP test station installed?			✓
Is a 6-month CP follow-up inspection/test scheduled? Projected inspection date: _____			✓
Was a site assessment conducted?			✓
Was contamination, including simple overfill, encountered and was it reported to DEQ? If so, indicate DEQ LUST number issued: _____			✓
Were internal inspections of all USTs completed before lining began on any UST?	✓		
Have the results of the internal tank inspections been submitted to and/or discussed with DEQ?	✓	NO	
If there were holes in any of the USTs, has a SUSPECTED release been reported to DEQ? If yes, indicate date reported: _____		✓	NO HOLES
Was the system tight-tested before placing back into service?			✓
Do all tank and piping materials comply with 40 CFR 280.20 as modified by OAR Chapter 340, Division 150?			✓
Have all items checked above been installed, upgraded or retrofitted in accordance with all codes, manufacturer's requirements and federal and state regulations?	✓		
Has the UST system owner/operator been provided with written documentation of the item(s) installed, upgraded or retrofitted and has the owner/operator been instructed to preserve these records?	✓		

6. AS-BUILT SITE PLAN



office

Parking Lot



ware
hou
Build

Fence

Rd

(always contact local authorities regarding permit requirements)

PROJECT NUMBER:

96214

Foss Maritime

TANK NUMBER:

#1

20,000

Loc	Top	R3/4	RSL	R1/4	Bot	L1/4	LSL	L3/4
1			7.7	7.7	7.6			
2			7.9	7.7	7.8			
3			7.9	8.0	7.9			
4			7.9	7.8	7.6			
5			7.6	8.0	7.9			
6			7.9	7.8	7.7			
7			7.8	7.9	7.8			
8			8.0	7.7	7.9			
9			7.8	7.7	7.6			
10			7.7	7.8	7.6			
11			7.9	7.6	7.9			
12			7.7	7.9	7.9			
13			7.7	7.8	7.6			
14			7.6	7.7	7.9			
15			7.8	7.7	7.7			
16			7.6	7.9	7.9			
17			7.9	7.9	7.9			
18			7.6	7.8	7.9			
19			7.9	7.9	8.0			
20			7.8	7.9	8.0			
21			8.0	7.8	7.9			
22			7.8	7.8	7.6			
23			7.9	8.0	8.0			
24			7.7	7.8	7.9			
25			7.9	8.0	7.9			
26			7.8	7.8	7.6			
27			7.8	7.8	7.9			
28			7.8	7.8	7.6			
29			7.9	7.8	7.7			
30			8.0	8.0	7.9			
31			7.9	7.7	7.6			
TOTAL			243.1	242.7	243.4			

Fill End	Horizontal	Vertical
1	7.7	7.7
2	7.8	7.9
3	7.9	7.8
4	8.0	7.9
5	7.9	7.7
6	7.9	7.8
7	7.8	7.7
8	7.8	7.9
9	7.8	7.9
10	8.0	8.0
11		
TOTAL	78.6	78.3

Other End	Horizontal	Vertical
1	7.9	7.8
2	8.0	7.9
3	7.9	7.8
4	7.8	7.9
5	7.9	7.8
6	7.9	7.8
7	8.0	7.9
8	7.9	7.8
9	7.8	7.9
10	7.9	8.0
11		
TOTAL	79.0	78.6

Tot. of Gauges % No. of Gauges = Ave. Thickness

1043.7 % 133 = 7.8

Average Thickness % Design Thickness = Percent of Design Thickness

7.8 % 8.0 mm = 97.5 %

Certified by UTG Level 1: ACCEPT P.F. OR REJECT

PROJECT NUMBER: 98214
TANK NUMBER: #2 20,000

Loc	Top	R3/4	RSL	R1/4	Bot	L1/4	LSL	L3/4
1				7.6	8.0	7.9		
2				7.8	7.9	7.8		
3				7.9	7.9	7.8		
4				7.7	7.8	7.9		
5				7.9	7.8	7.9		
6				7.8	7.8	7.9		
7				7.9	7.9	7.8		
8				7.9	8.0	7.9		
9				7.8	7.9	7.8		
10				7.9	7.9	7.9		
11				7.9	8.0	8.0		
12				7.8	7.9	8.0		
13				7.6	7.8	7.7		
14				7.9	8.0	7.9		
15				7.9	7.8	7.7		
16				7.8	7.9	7.8		
17				7.8	7.9	7.8		
18				7.8	7.9	7.8		
19				7.7	7.8	7.9		
20				7.8	7.7	7.6		
21				8.0	7.9	7.7		
22				8.0	7.8	7.8		
23				7.9	7.9	7.8		
24				7.9	8.0	7.7		
25				7.8	7.9	7.8		
26				7.8	7.8	7.9		
27				7.9	7.8	7.9		
28				7.8	7.9	8.0		
29				7.9	8.0	7.9		
30				7.8	7.9	8.0		
31				7.9	8.0	7.9		
TOTAL				242.9	244.5	243.1		

Fill End	Horizontal	Vertical
1	7.9	7.9
2	8.0	8.0
3	7.9	7.8
4	7.9	7.8
5	7.8	7.8
6	7.9	7.7
7	8.0	8.0
8	7.7	7.9
9	7.8	7.8
10	8.0	7.9
11		
TOTAL	78.9	78.6

Other End	Horizontal	Vertical
1	7.9	7.9
2	7.8	7.9
3	7.7	7.8
4	8.0	7.9
5	7.9	7.8
6	7.8	7.9
7	7.9	7.8
8	8.0	7.7
9	7.9	7.8
10	7.9	7.8
11		
TOTAL	78.8	78.3

Tot. of Gauges % No. of Gauges = Ave. Thickness
1045.1 % 133 = 7.9

Average Thickness % Design Thickness = Percent of Design Thickness
7.9 % 8.0 mm = 98.7 %

Certified by UTG Level 1: ACCEPT P.F. OR REJECT _____

ULTRASONIC THICKNESS GAUGING REPORT

PROJECT NUMBER:

98214

TANK NUMBER:

#3 6,000

Loc	Top	R3/4	RSL	R1/4	Bot	L1/4	LSL	L3/4
1				6.7	6.8	6.9		
2				6.8	6.8	6.9		
3				6.9	6.6	6.7		
4				6.9	6.5	6.7		
5				6.6	6.6	6.7		
6				6.8	6.7	6.9		
7				6.9	6.8	6.7		
8				6.7	6.7	6.7		
9				6.9	6.5	6.8		
10				6.5	6.7	6.8		
11				6.7	6.7	6.9		
12				6.7	6.6	6.8		
13				6.8	6.7	6.8		
14				6.9	6.9	6.8		
15				6.8	6.8	6.9		
16				6.7	6.7	6.8		
17				6.7	6.6	6.8		
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
TOTAL			115.0	113.7	115.8			

Fill End	Horizontal	Vertical
1	6.8	6.7
2	6.9	6.8
3	6.9	6.8
4	6.8	6.7
5	6.7	6.7
6	6.8	6.7
7	6.9	6.7
8	6.7	6.8
9		
10		
11		
TOTAL	54.5	54.0

Other End	Horizontal	Vertical
1	6.7	6.6
2	6.7	6.8
3	6.6	6.8
4	6.7	6.7
5	6.8	6.7
6	6.6	6.5
7	6.8	6.8
8	6.9	6.7
9		
10		
11		
TOTAL	53.8	54.0

Tot. of Gauges % No. of Gauges = Ave. Thickness

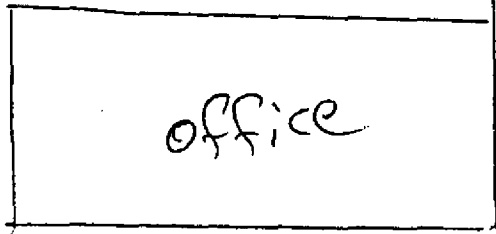
560.8 % 83 = 6.8

Average Thickness % Design Thickness = Percent of Design Thickness

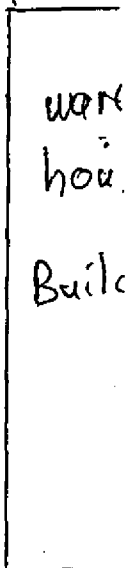
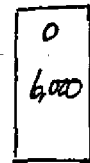
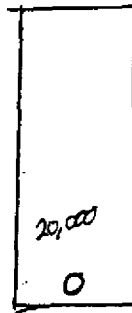
6.8 % 6.9mm = 98.5%

Certified by UTG Level 1: ACCEPT P.F OR REJECT

156 Water
6. AS-BUILT SITE PLAN



Parking Lot



(always contact local authorities regarding permit requirements)

INSTALLER'S OATH: I certify that I have been the Oregon DEQ licensed supervisor present on site during the above listed upgrade/retrofit/replacement activities and to the best of my knowledge they have been conducted in compliance with all state and federal laws, regulations and industry standards and procedures pertaining to underground storage tanks. I further certify that the information contained in this report and checklist is true to the best of my belief and knowledge.

Installer:

Patrick Fogarty
print name

Patrick Fogarty
signature

Position:

Foreman

Company:

UICC

Date: 10-21-98

UST Service Provider Firm, Executive Officer:

Traci Ulrich
print name

Traci Ulrich
signature

10.28.98
date

UST FACILITY OWNER/OPERATOR UPGRADE CERTIFICATION STATEMENT: I hereby certify that the information provided on this checklist concerning the upgrade status of my tank system(s) is accurate.

Rafael A. Caballero
print name

RA Caballero
signature

11/10/98
date

OWNER'S FINANCIAL RESPONSIBILITY INFORMATION SECTION

The tank owner has financial responsibility, if applicable, in accordance with OAR 340-150-004. Please specify:

Method of financial responsibility: _____

Insurer: _____ Policy Number: _____

This form must be mailed to the appropriate DEQ Regional Office within 30 days after the upgrade/retrofit project is completed. For information, call the appropriate DEQ Regional Office or the toll free number, 1-800-742-7878.

DEQ INSPECTIONS: This form may be used by DEQ Inspectors for oversight purposes. A DEQ inspector is not required to inspect the upgrade/retrofit. A DEQ inspector may not be on site or available during all of the inspections listed on this form. In the case of an oversight inspection, the DEQ inspector should check all boxes that are appropriate for the inspection(s) and forward a copy to the appropriate Regional Office for the facility file.

DEQ Inspector's Signature _____ Inspection Date(s) _____



October 28, 1998

Foss Maritime Company
ATTN: Mr. Rafael Caballero
P.O. Box 83018
Portland, OR 97283-0018

Dear Mr. Caballero:

Enclosed is the 'Underground Storage Tank - Upgrade / Retrofit Checklist' required by D.E.Q. for the tank lining system installed at your site on St. Helens Road in Portland, Oregon. Please fill in any missing information, on all pages where indicated with highlighter, and mail (with the enclosed ultrasonic thickness gauging reports) to Department of Environmental Quality at:

DEQ / Northwest Region
2020 SW 4Th Avenue, Suite 400
Portland, OR 97201-5884

Additional copies of the Checklist, ultrasonic gauging reports, and other applicable paperwork will be mailed directly to you, under separate cover, to retain with your permanent UST records.

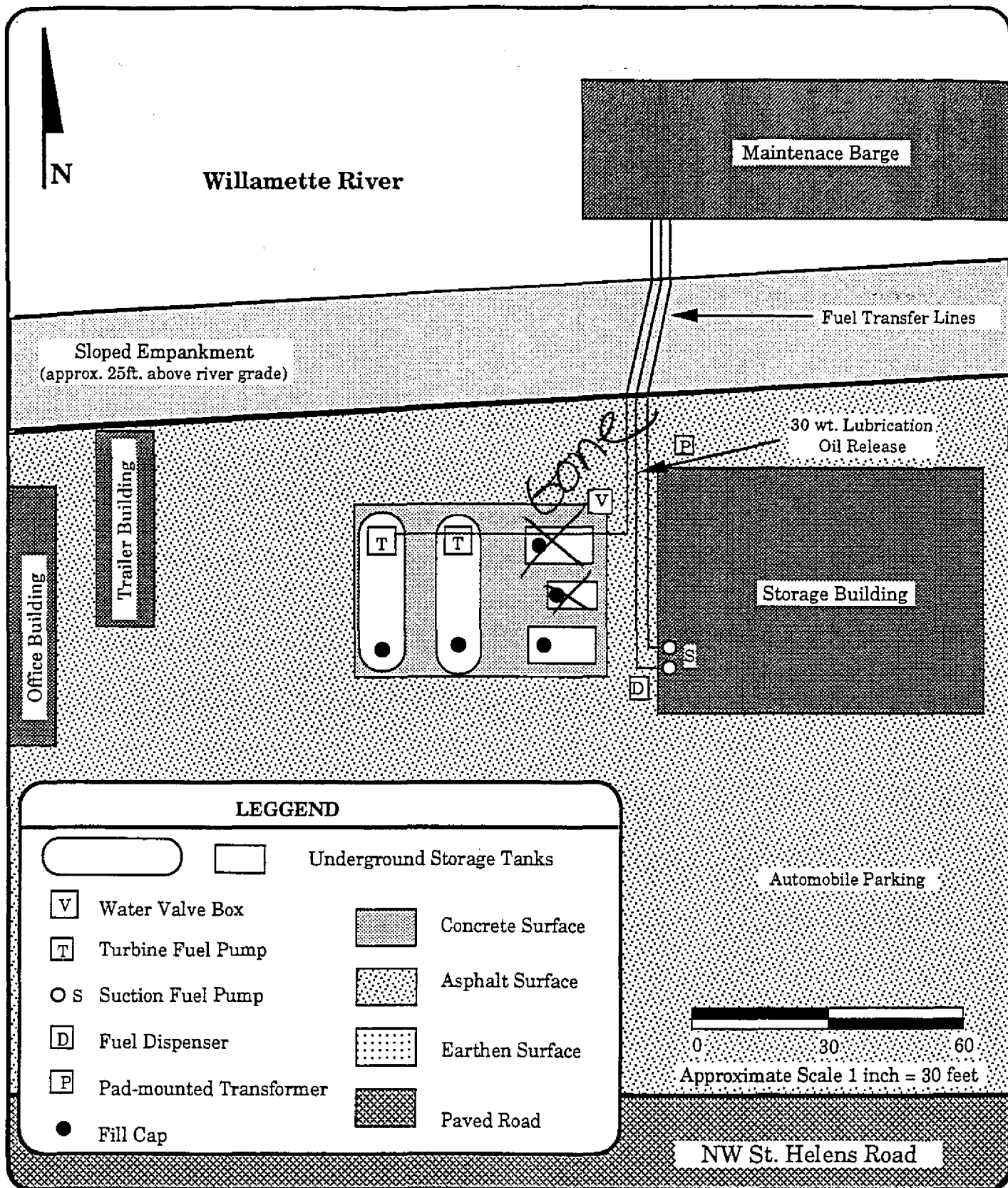
Should you have any questions or concerns please contact me at 1-800-648-9587.

Thank you,

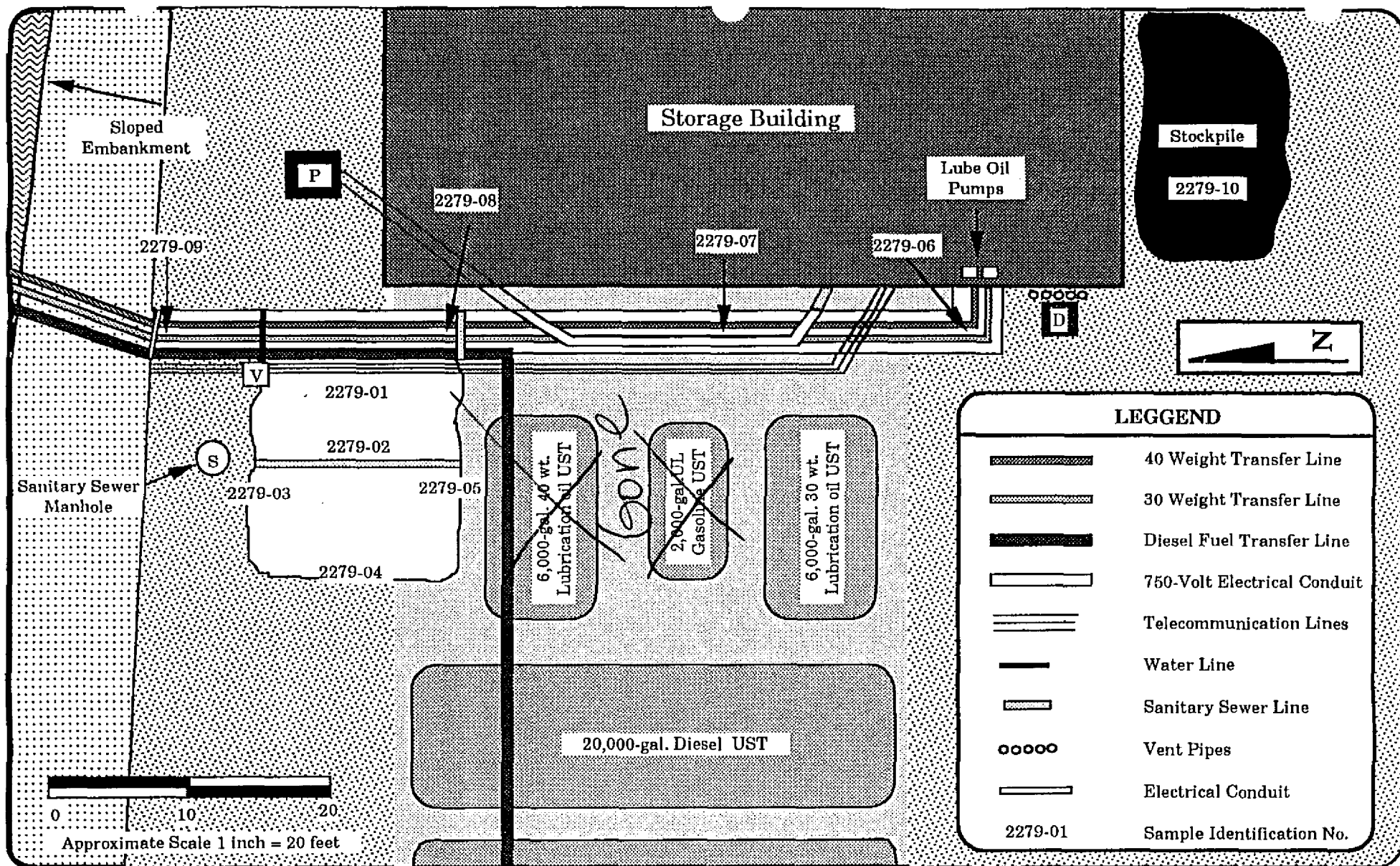
A handwritten signature in black ink that reads "Traci L. Ulrich". The signature is fluid and cursive, with the first name "Traci" being more prominent.

Traci L. Ulrich

enclosures



<p>HAI Project #2279</p> <p>February 1993</p>	<p>HAHN & ASSOCIATES INCORPORATED</p> <p>ENVIRONMENTAL MANAGEMENT 434 NW SIXTH AVENUE, SUITE 203 PORTLAND, OREGON 97209 503/796-0717</p>	<p>SITE MAP</p> <p>Brix Maritime Co. 9030 NW St. Helens Road Portland, Oregon</p>	<p>FIGURE 2</p>
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HAI Project #2279	HAHN & ASSOCIATES INCORPORATED	Site Detail and Sampling Map	FIGURE 3
February 1993 BTL	ENVIRONMENTAL MANAGEMENT 434 NW SIXTH AVENUE, SUITE 203 PORTLAND, OREGON 97209 503/796-0717	Brix Maritime Company 9030 NW St. Helens Road Portland, Oregon	

Oregon Department of Environmental Quality

UNDERGROUND STORAGE TANK - UPGRADE / RETROFIT CHECKLIST

Activities conducted at one UST facility may be reported together by completing pages 1, 5, and 6 once for the entire facility.

1. UST SYSTEM OWNER AND LOCATION

DEQ Facility ID number: 7374
DEQ UST Facility Name: Foss Maritime
Facility (location) address: 9030 St. Neleas Rd.
Portland, OR 97231

UST owner/operator name: Foss Maritime Co
Owner/operator mailing address: P.O. Box 83018
Portland, OR 97283-0018

Owner/operator Telephone: (503) 978-6544

2. TANK UPGRADE/RETROFIT PERFORMED BY:

Service Provider: Pacific N.W. Ser. DEQ License Number: 15034
Address: 1035-A Vandercant Way Lic. Expiration Date: 2/7/99
Congress, WA 98632
Telephone: (360) 425-6955

Licensed Supervisor: George V. Nae DEQ License Number: 11562
Lic. Expiration Date: 2/29/00

Pages 2 through 4 of this checklist must be completed separately for each UST system (tank and associated piping) upgraded or retrofitted at the site. For more than one UST system you may photocopy this form prior to completing.

3. UST SYSTEM INFORMATION

- a. DEQ tank permit number (letters): AEFH b. Year installed: 1979
- c. Tank capacity in gallons: 20,000
- d. Tank material (check): ☒ steel ☐ fiberglass reinforced plastic (FRP)
☐ composite other (specify) _____
- e. Tank construction (check): ☒ single wall ☐ double wall ☐ partitioned

4. UPGRADE/RETROFIT INFORMATION

- a. Reason for upgrade/retrofit (check all that apply):
☒ to comply with 1998 upgrading requirements for existing UST systems
☐ to repair structural defects in tank(s)
☐ preventive maintenance
☐ to comply with corrective action requirements
☐ other (describe): _____
- b. Type of upgrade/retrofit (circle all that apply):
- * installation of internal lining:
rubber alkyd epoxy phenolic glass other (specify) _____
- * installation of spill and overfill prevention equipment:
catchment basin auto shutoff overfill alarm ball float valve
drop tube valve other (specify) _____

Pages 2 through 4 of this checklist must be completed separately for each UST system (tank and associated piping) upgraded or retrofitted at the site. For more than one UST system you may photocopy this form prior to completing.

3. UST SYSTEM INFORMATION

- a. DEQ tank permit number (letters): AEGK b. Year installed: 1979
- c. Tank capacity in gallons: 6,000
- d. Tank material (check): ☒ steel ☐ fiberglass reinforced plastic (FRP)
☐ composite other (specify) _____
- e. Tank construction (check): ☒ single wall ☐ double wall ☐ partitioned

4. UPGRADE/RETROFIT INFORMATION

- a. Reason for upgrade/retrofit (check all that apply):
☒ to comply with 1998 upgrading requirements for existing UST systems
☐ to repair structural defects in tank(s)
☐ preventive maintenance
☐ to comply with corrective action requirements
☐ other (describe): _____
- b. Type of upgrade/retrofit (circle all that apply):
- * installation of internal lining:
rubber alkyd ☒ epoxy ☐ phenolic ☐ glass other (specify) _____
 - * installation of spill and overfill prevention equipment:
catchment basin ☐ auto shutoff ☐ overfill alarm ☒ ball float valve
drop tube valve ☐ other (specify) Spill Buckets

Items 2 through 4 of this checklist must be completed separately for each UST system (tank and associated piping) upgraded or retrofitted at the site. For more than one UST system you may photocopy this form prior to completing.

3. UST SYSTEM INFORMATION

- a. DEQ tank permit number (letters): AEFG b. Year installed: 1979
- c. Tank capacity in gallons: 20,000
- d. Tank material (check): ☒ steel ☐ fiberglass reinforced plastic (FRP)
☐ composite other (specify) _____
- e. Tank construction (check): ☒ single wall ☐ double wall ☐ partitioned

4. UPGRADE/RETROFIT INFORMATION

- a. Reason for upgrade/retrofit (check all that apply):
☒ to comply with 1998 upgrading requirements for existing UST systems
☐ to repair structural defects in tank(s)
☐ preventive maintenance
☐ to comply with corrective action requirements
☐ other (describe): _____
- b. Type of upgrade/retrofit (circle all that apply):
- * installation of internal lining:
rubber alkyd ☒ epoxy ☐ phenolic ☐ glass other (specify) _____
 - * installation of spill and overfill prevention equipment:
catchment basin auto shutoff overfill alarm ☒ ball float valve
drop tube valve other (specify) _____

- * installation, upgrade/retrofit or repair of release detection equipment (check all that apply):

☒ automatic tank gauge
☒ vapor monitoring equipment
☐ groundwater monitoring equipment
☐ interstitial monitoring within secondary barrier
☐ interstitial monitoring within double wall
☒ ~~automatic fire leak detector~~
☐ other (specify) _____

- * tank upgrade (describe if different from above):

Spill Buckets

- * replacement of metal pipe sections and fittings (indicate new piping material):

ENVIRON & FRP VENTS

- * replacement of fiber glass pipe sections and fittings (indicate new piping material):

- * other piping changes if applicable (describe):

Above ground
Steel

c. Date of completion of upgrade/retrofit indicated above:

11/13/98

5. CHECKLIST (Check YES or NO. Where a specific item is "not applicable" to the situation, please check the n/a box.)

Was the DEQ Regional Office notified at least 30 days in advance of the planned project start date?

Was the DEQ Regional Office notified 72 hours in advance prior to beginning the upgrade/retrofit? If yes, indicate 3-day number issued: _____

Are the UST annual permit fees current?

Was external cathodic protection (CP) installed/upgraded or retrofitted?

Was a separate CP report submitted or attached?

Was a CP test station installed?

Is a 6-month CP follow-up inspection/test scheduled?

Projected inspection date: _____

Was a site assessment conducted?

Was contamination, including simple overfill, encountered and was it reported to DEQ? If so, indicate DEQ LUST number issued: 26-93-0009

Were internal inspections of all USTs completed before lining began on any UST?

Have the results of the internal tank inspections been submitted to and/or discussed with DEQ?

If there were holes in any of the USTs, has a SUSPECTED release been reported to DEQ? If yes, indicate date reported: 10/19/98

Was the system tight-tested before placing back into service?

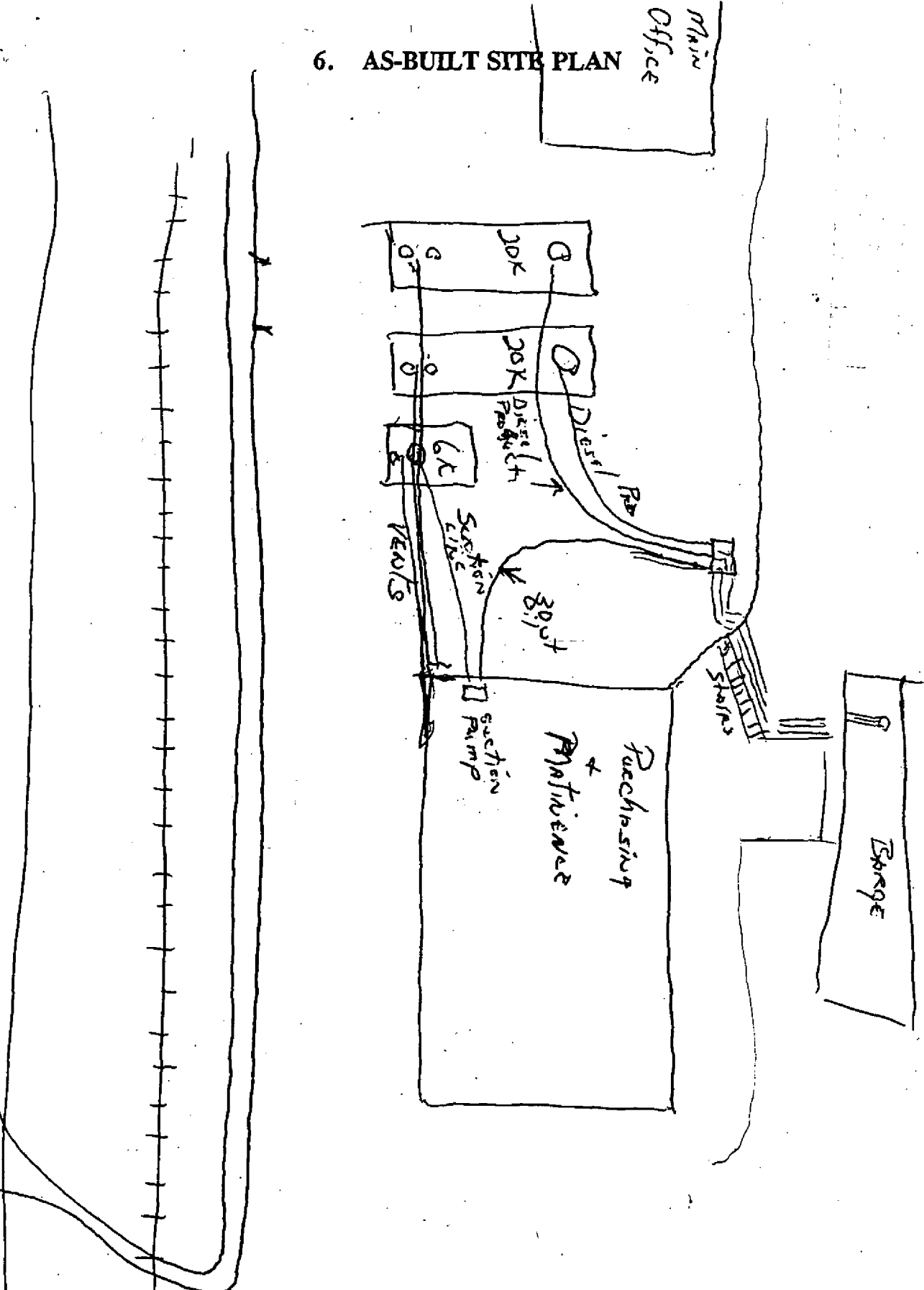
Do all tank and piping materials comply with 40 CFR 280.20 as modified by OAR Chapter 340, Division 150?

Have all items checked above been installed, upgraded or retrofitted in accordance with all codes, manufacturer's requirements and federal and state regulations?

Has the UST system owner/operator been provided with written documentation of the item(s) installed, upgraded or retrofitted and has the owner/operator been instructed to preserve these records?

YES	NO	N/A
✓		
✓		
✓		
✓		
✓		✓
		✓
		✓
		✓
✓		
✓		
		✓
✓		
✓		
✓		
✓		

6. AS-BUILT SITE PLAN



(always contact local authorities regarding permit requirements)

INSTALLER'S OATH: I certify that I have been the Oregon DEQ licensed supervisor present on site during the above listed upgrade/retrofit/replacement activities and to the best of my knowledge they have been conducted in compliance with all state and federal laws, regulations and industry standards and procedures pertaining to underground storage tanks. I further certify that the information contained in this report and checklist is true to the best of my belief and knowledge.

Installer:

Garrett Hale
print name

[Signature]
signature

Position:

Supervisor

Company:

F.N.S.

Date:

11/16/98

UST Service Provider Firm, Executive Officer:

Patrick Murphy
print name

[Signature]
signature

11/16/98
date

UST FACILITY OWNER/OPERATOR UPGRADE CERTIFICATION STATEMENT: I hereby certify that the information provided on this checklist concerning the upgrade status of my tank system(s) is accurate.

Rafael A. Caballero
print name

[Signature]
signature

12/18/98
date

OWNER'S FINANCIAL RESPONSIBILITY INFORMATION SECTION

The tank owner has financial responsibility, if applicable, in accordance with OAR 340-150-004. Please specify:

Method of financial responsibility: _____

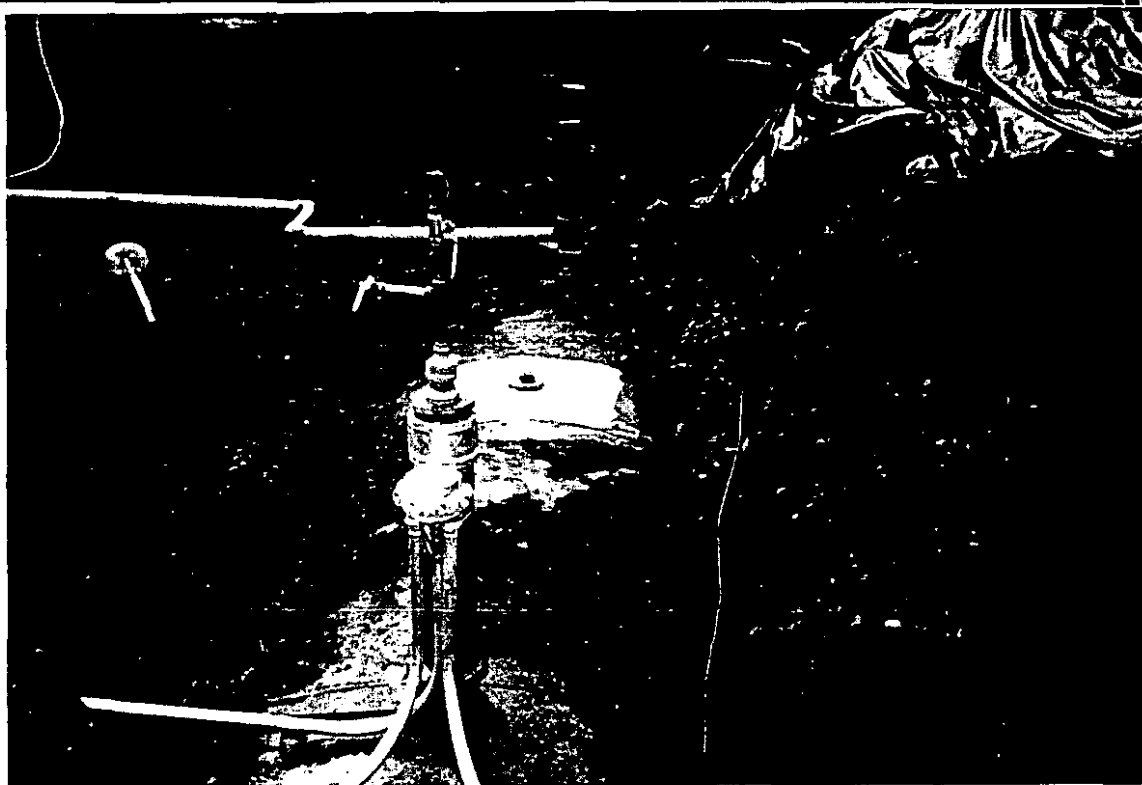
Insurer: _____

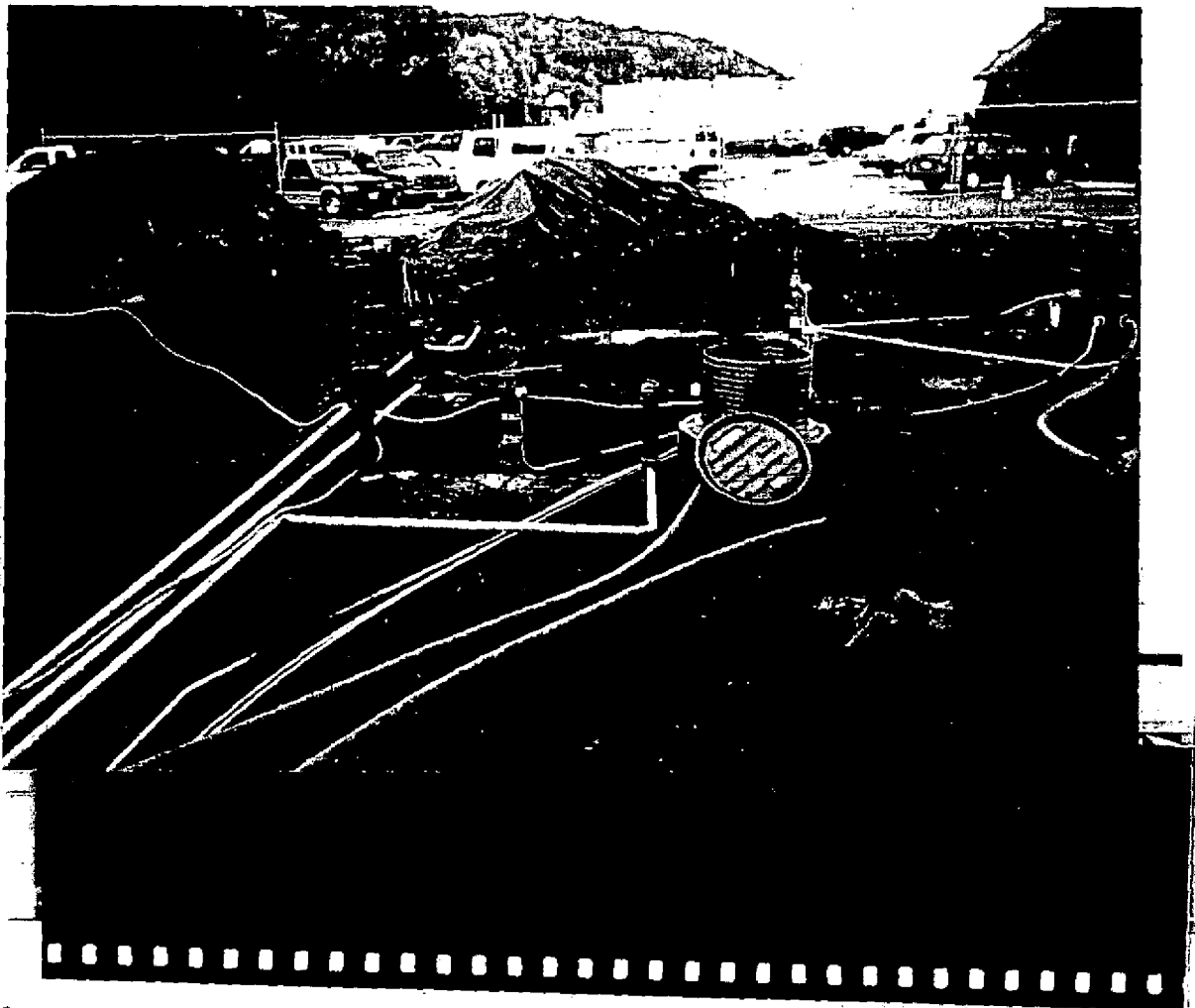
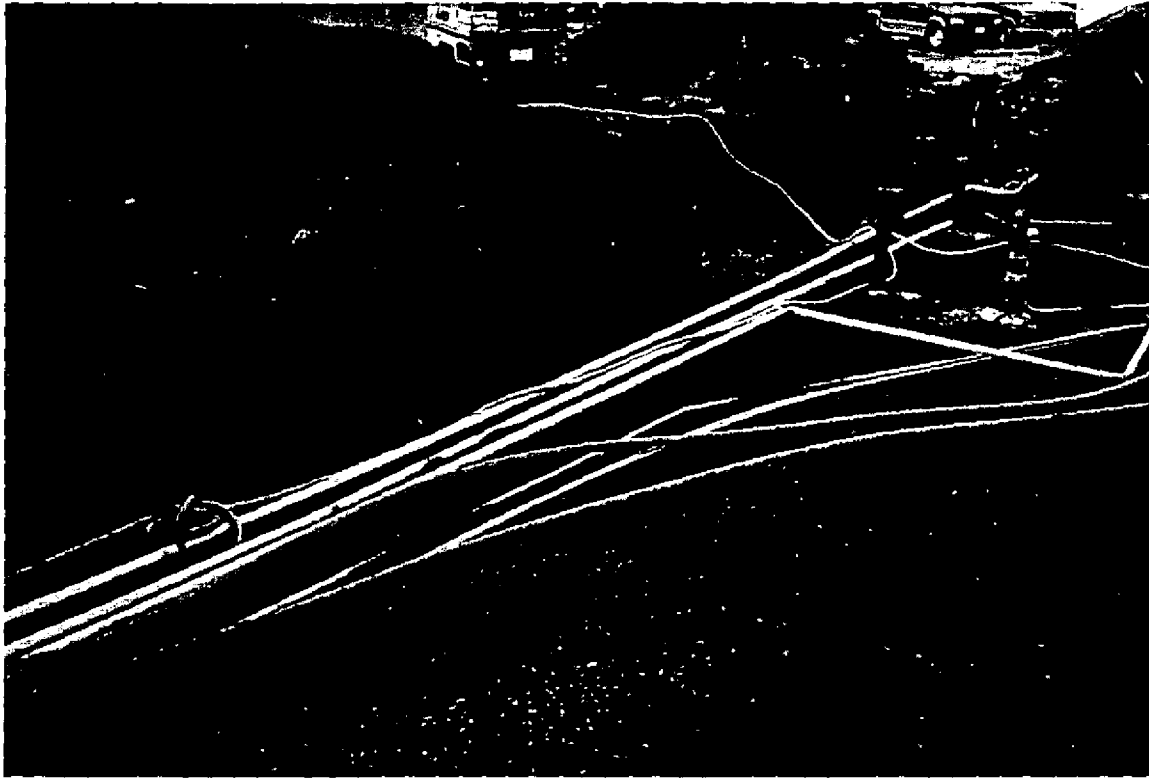
Policy Number: _____

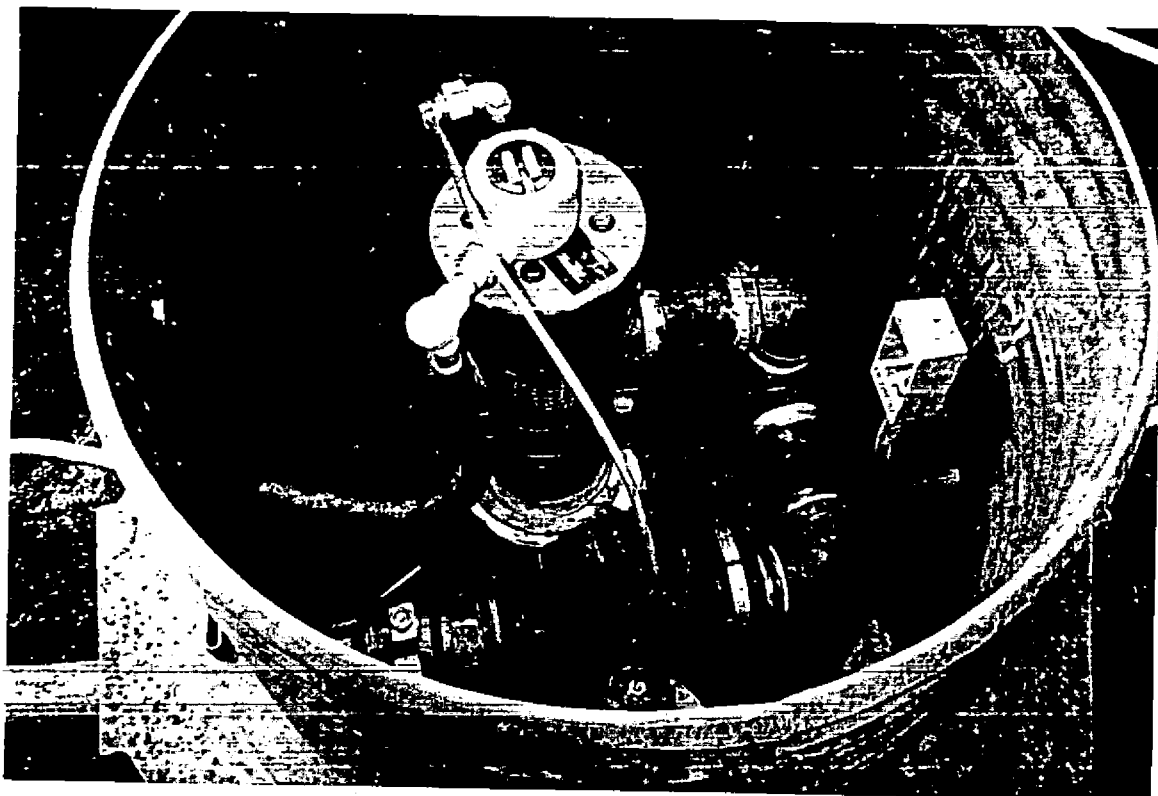
This form must be mailed to the appropriate DEQ Regional Office within 30 days after the upgrade/retrofit project is completed. For information, call the appropriate DEQ Regional Office or the toll free number, 1-800-742-7878.

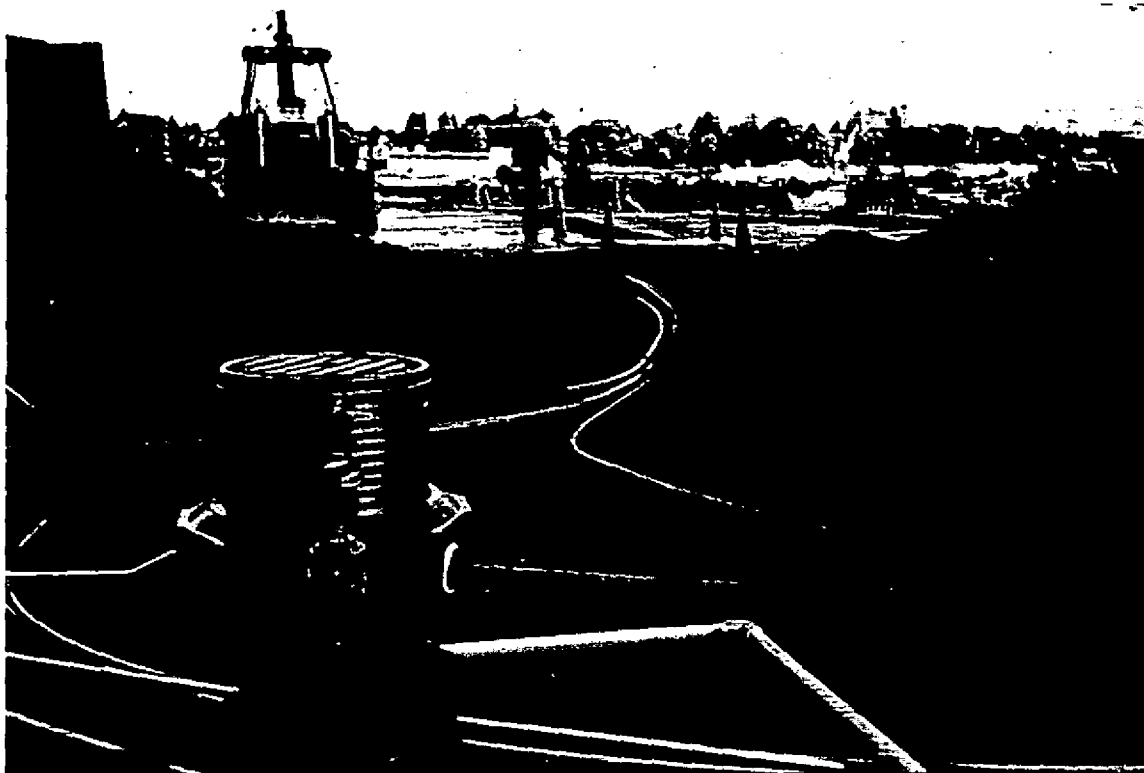
DEQ INSPECTIONS: This form may be used by DEQ Inspectors for oversight purposes. A DEQ inspector is not required to inspect the upgrade/retrofit. A DEQ inspector may not be on site or available during all of the inspections listed on this form. In the case of an oversight inspection, the DEQ inspector should check all boxes that are appropriate for the inspection(s) and forward a copy to the appropriate Regional Office for the facility file.

DEQ Inspector's Signature _____ Inspection Date(s) _____

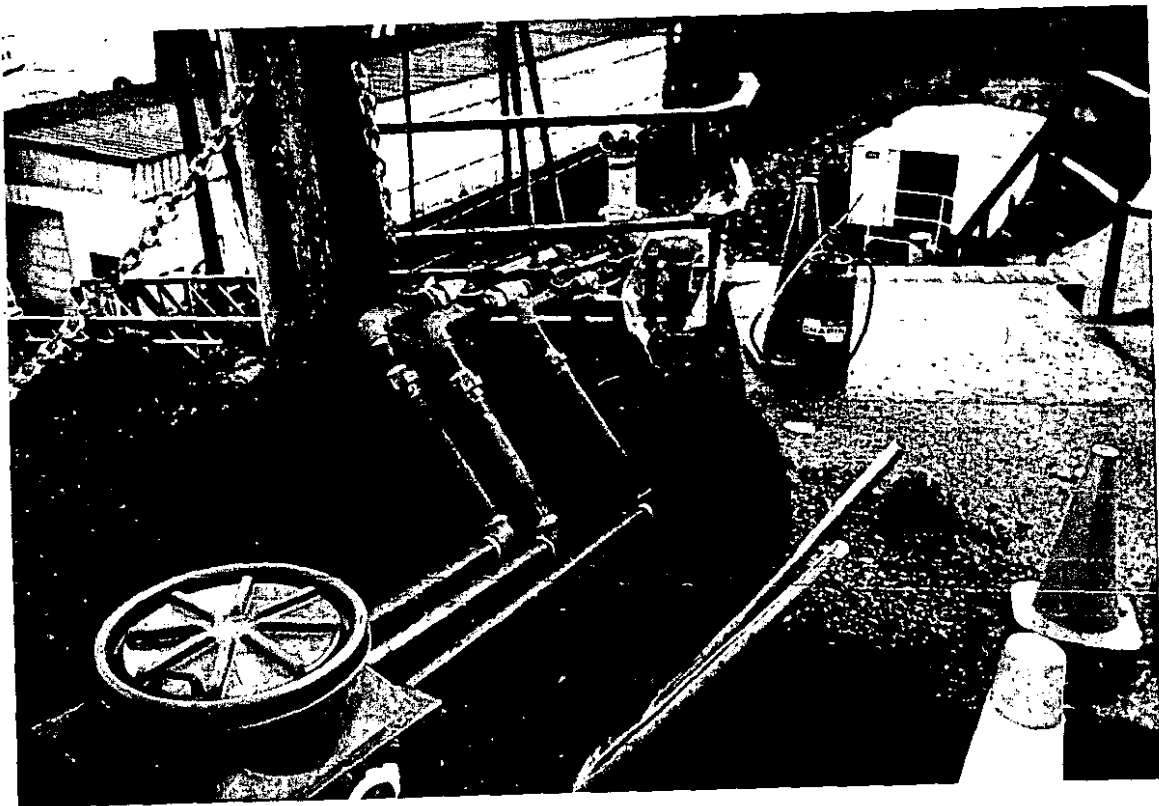
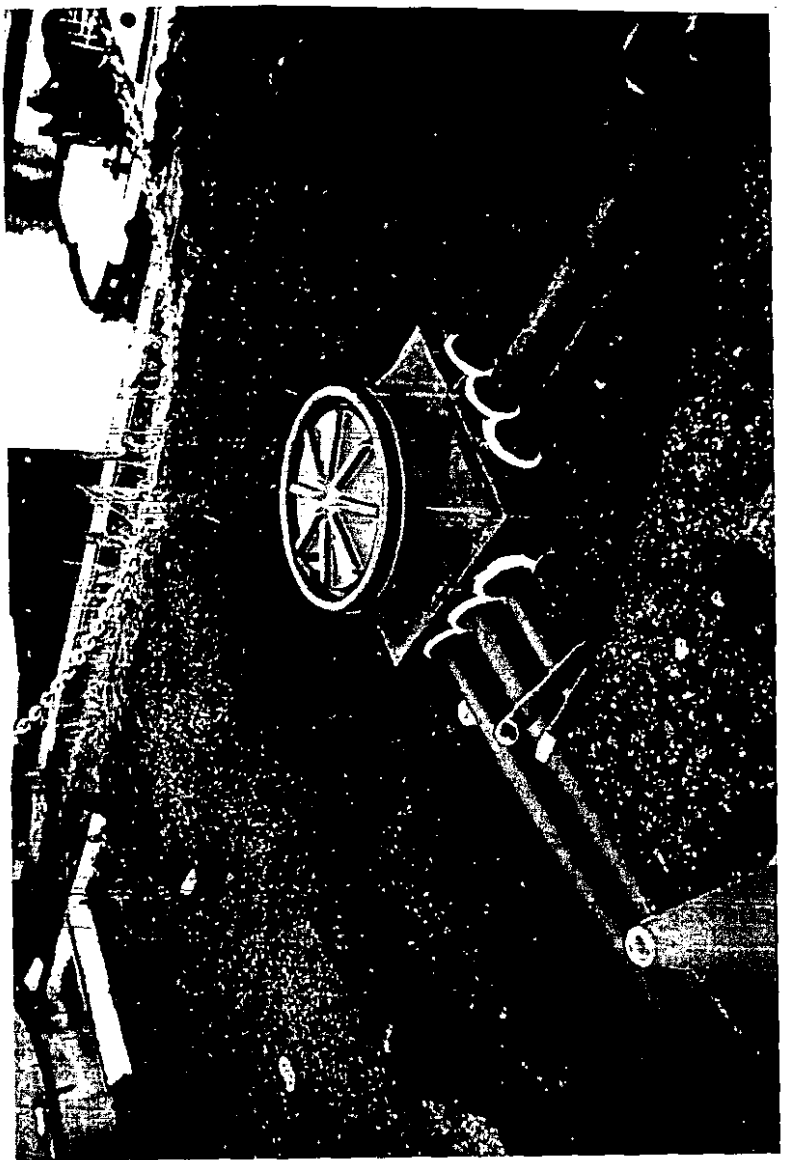
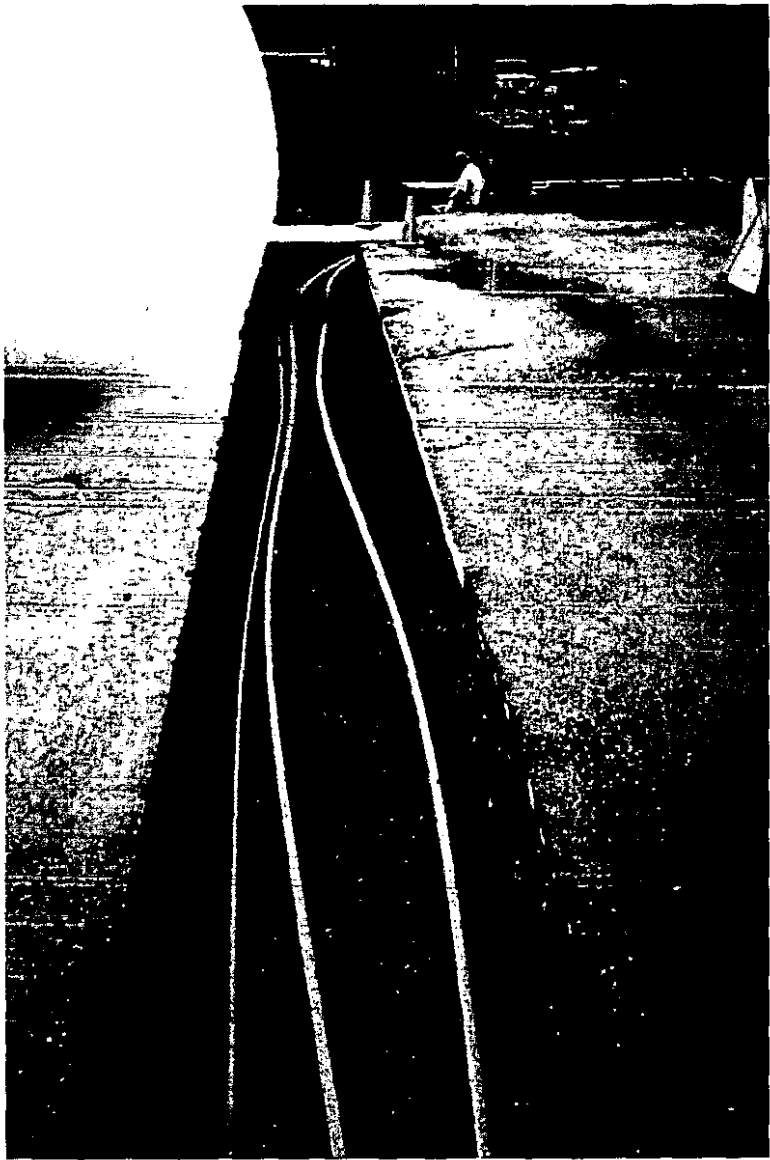


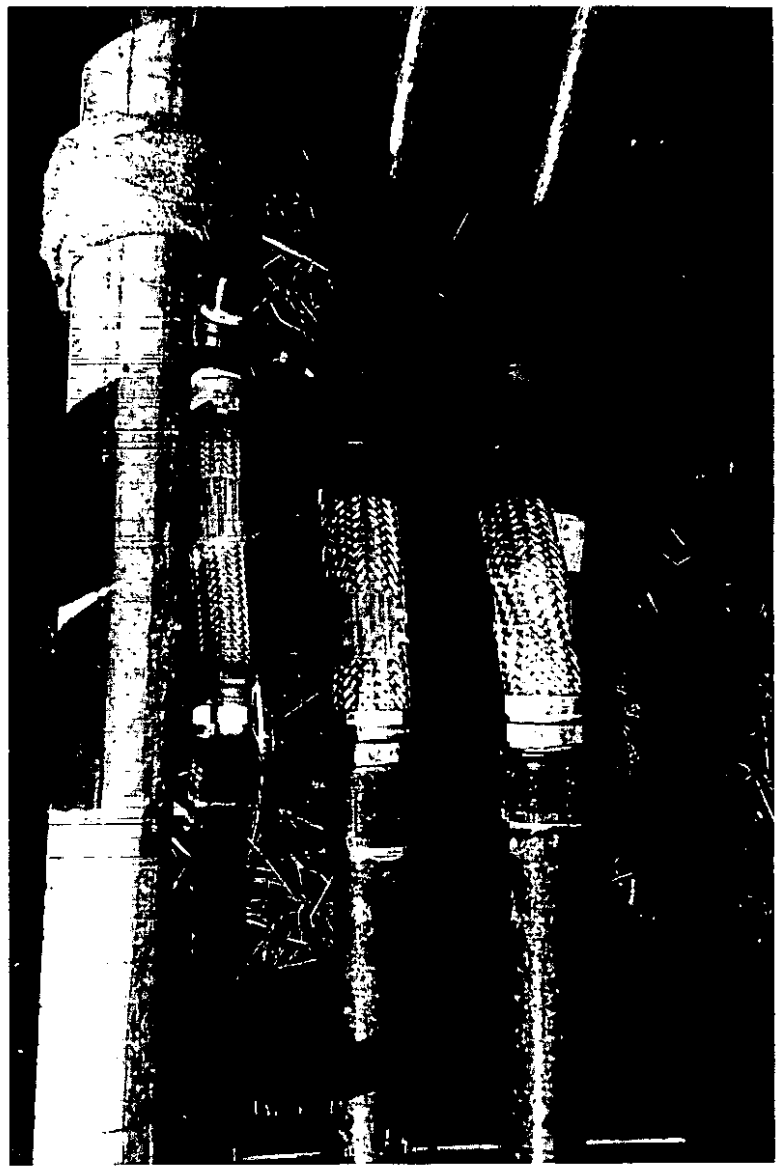
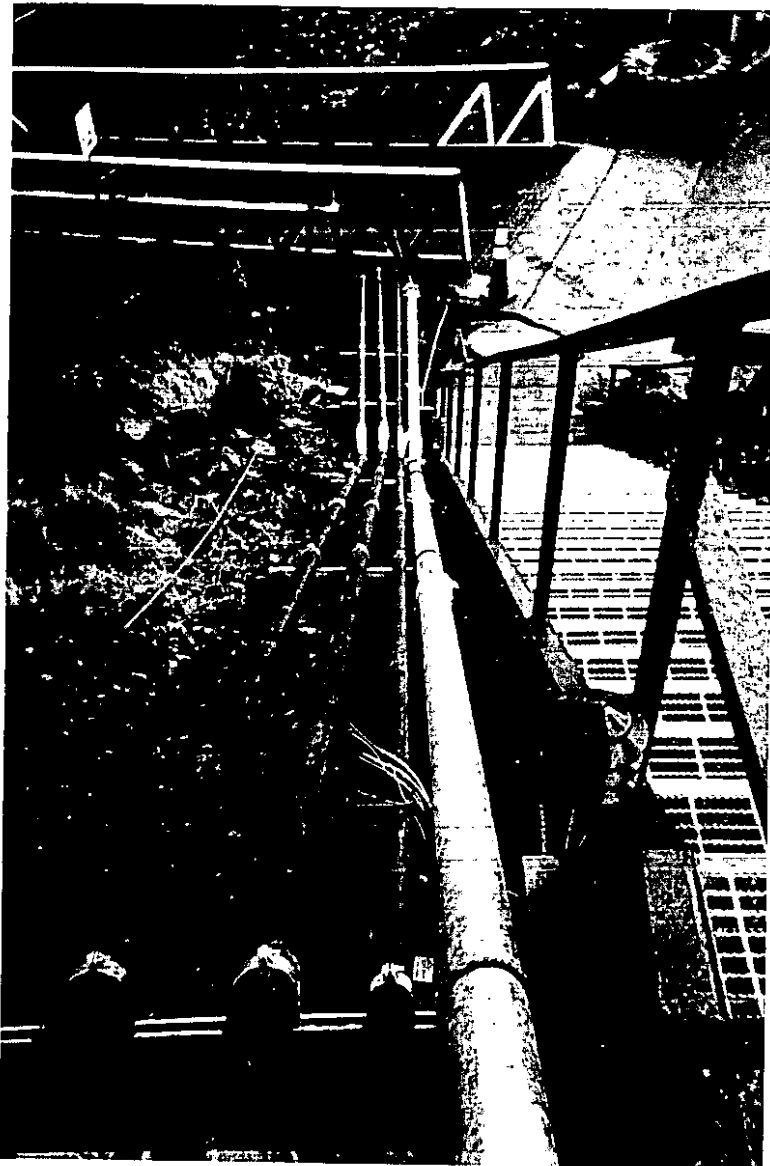


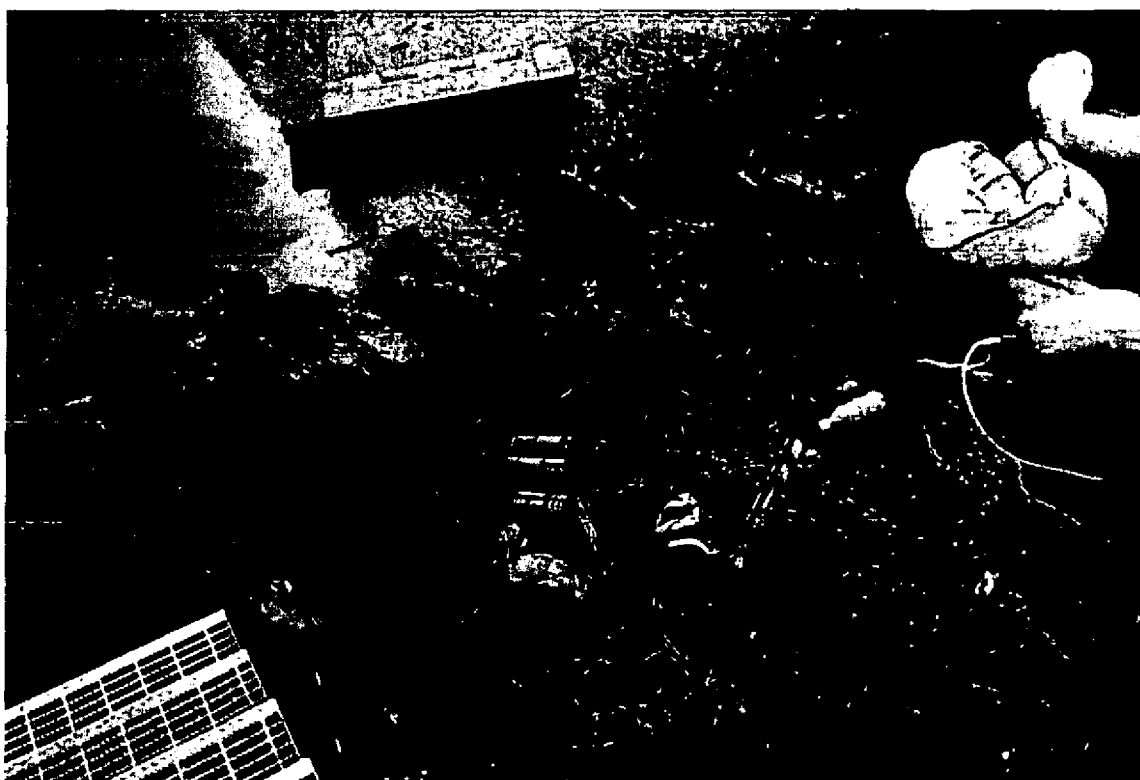
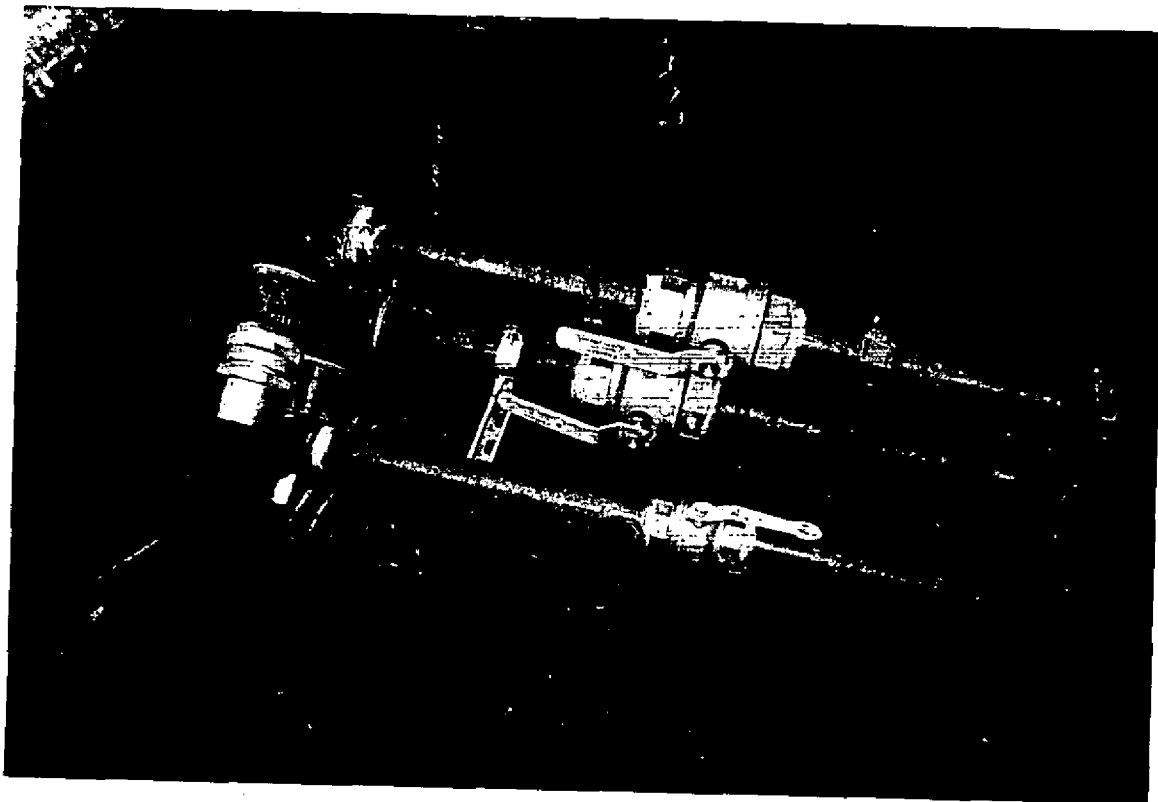




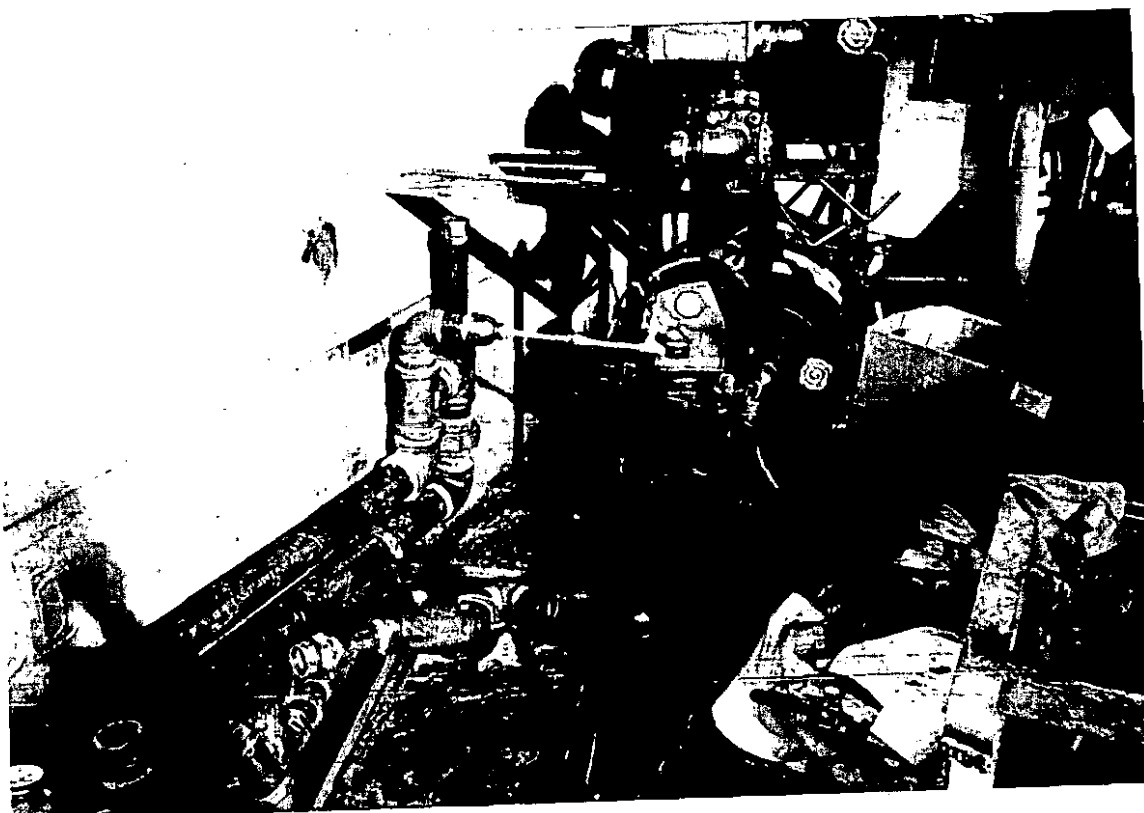
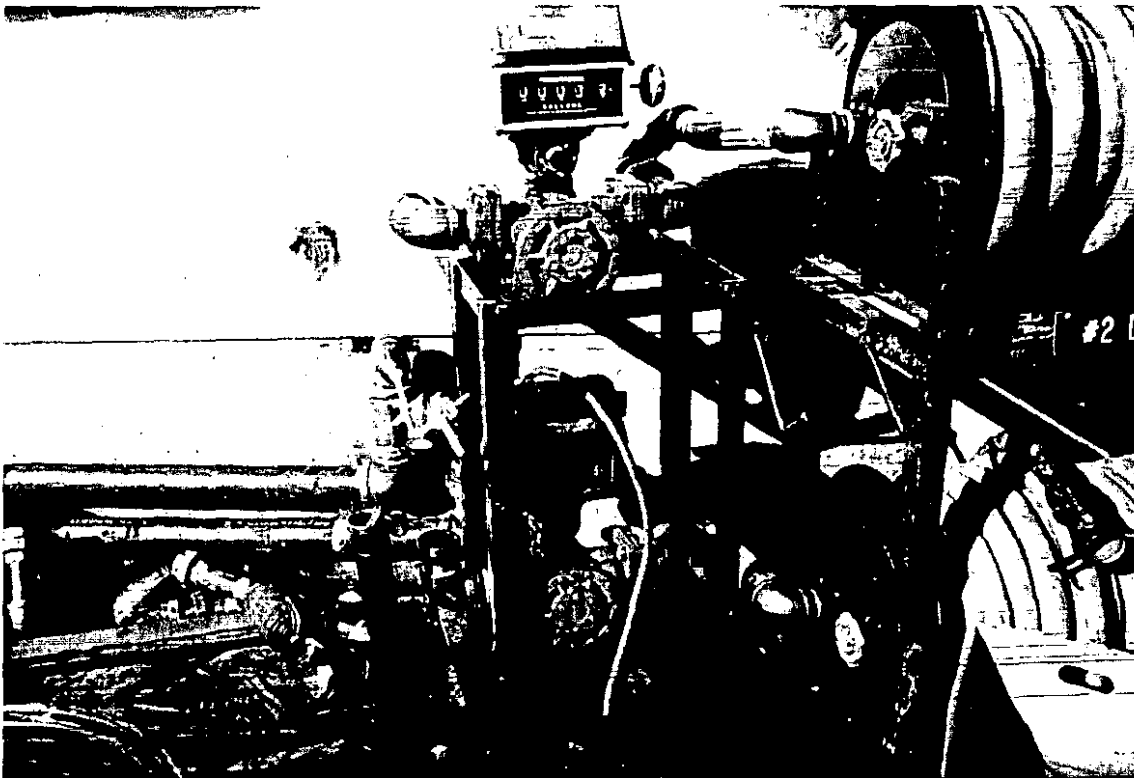












Evergreen Environmental Services, Inc.

17108 - 9th Avenue Southeast • Mill Creek, WA 98012 • (206) 787-8987 • (800) 457-8986 • Fax (206) 787-7812

Certificate of Tightness

Underground storage tank system(s) were tested and found tight for:

Tank Owner: FOSS MARITIME
P.O. BOX 83018
PORTLAND, OR 97283-0018

Test Date: JANUARY 23, 1997

Test Site Address: FOSS MARITIME
9030 NW ST. HELENS RD
PORTLAND, OR

(5) Tank(s) Only
(5) Line(s) only
() Detector(s) only

Tank Sizes & Products Tested:

- | | |
|---------------------------|----|
| 1. TWO (2) 20,000 DIESEL | 4. |
| 2. TWO (2) 6,000 LUBE OIL | 5. |
| 3. 2,000 UNLEADED | 6. |

Lines Tested: TWO (2) LUBE OIL, DIESEL
Leak Detectors Tested: N/A
Identification Number: IFCI# 68812
Name of Certified Tester: FRANK NICHOLS



Signature
CERTIFICATION ANALYST

Evergreen Environmental Services, Inc.

LINE TEST DATA SHEET

Location: Foss Maritime Site ID# _____
 Address: 9030 N.W. St. Helens Rd Test Date: 1/23/97
Portland, OR 97231 Operator: Frank Nichols

	PRODUCT				
	Lube Oil PLUS 40W	Lube Oil UNL 30W	SUPER	DSL.	
Pump Manufacturer	Cent.	Cent.		Red Jacket	
Isolation mechanism (pump)	Plug	Plug		Plug	
Isolation mechanism (dispenser)					
Test pressure 1½ times working pressure	150	150		150	
Initial cylinder level	N/A	N/A		.0475	
Final cylinder level	{	{		.0435	
Leak Rate - ICL - FCL X2	{	{		-.0080	
Time completed	{	{		15:20	
Time started	{	{		14:50	
Total test time/30 minute minimum	1 hr.	1 hr.		30 min	
Conclusion (pass or fail)	Pass	Pass		Pass	

TECHNICIAN SIGNATURE: _____

Frank Nichols

DATE: _____

1/23/97

Comments:

Note: Lube Oil Lines were tested with nitrogen pressure at 150 psi and held for 1 hr.
 No Line Leak Detectors installed on Diesel Turbines.
 These are manifold together on Common Line.

OICE #05000197

TEST DATE: 01/23/97

EVERGREEN ENVIRONMENTAL SERVICES, INC.
19121-60th AVE. WEST #2
LYNNWOOD, WASHINGTON, 98036
(206) 712-8986

TANK STATUS EVALUATION REPORT

***** CUSTOMER DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97283-0018

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** SITE DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97231

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** COMMENT LINES *****

CURRENT EPA STANDARDS DICTATE
THAT FOR UNDERGROUND FUEL TANKS, THE MAXIMUM ALLOWABLE LEAK/GAIN RATE
OVER THE PERIOD OF ONE HOUR IS .05 GALLONS.

TANK #1: DIESEL FUEL 2 TYPE: STEEL RATE: .035299 G.P.H. GAIN

TANK IS TIGHT.

TANK #2: DIESEL FUEL 2 TYPE: STEEL RATE: .005110 G.P.H. GAIN

TANK IS TIGHT.

TANK #3: REG UNLEADED TYPE: STEEL RATE: .001650 G.P.H. GAIN

TANK IS TIGHT.

OPERATOR: FRANK NICHOLS

SIGNATURE: 

DATE: 1/23/97

***** C U S T O M E R D A T A *****

JOB NUMBER : 000197
 CUSTOMER (COMPANY NAME) : FOSS MARITIME
 CUSTOMER CONTACT(LAST, FIRST): CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97283-0018
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

***** C O M M E N T L I N E S *****

***** S I T E D A T A *****

SITE NAME (COMPANY NAME) : FOSS MARITIME
 SITE CONTACT(LAST, FIRST) : CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97231
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

GROUND WATER LEVEL (FT) : 0
 NUMBER OF TANKS : 3
 LENGTH OF PRE-TEST (MIN) : 30
 LENGTH OF TEST (MIN) : 300

***** T A N K D A T A *****

	TANK NO. 1	TANK NO. 2	TANK NO. 3	TANK NO. 4
TANK DIAMETER (IN)	124	127	76	
LENGTH (FT)	31.88	30.39	8.49	
VOLUME (GAL)	20000	20000	2000	
TYPE	ST	ST	ST	
FUEL LEVEL (IN)	87	91.7	53.4	
FUEL TYPE	DIESEL 2	DIESEL 2	REG UNLD	
dVOL/dy (GAL/IN)	187.92	179.65	30.63	
CALIBRATION ROD	DISTANCE			
1	10.6563	10.6563	10.6563	
2	26.9531	26.9531	26.9531	
3	41.9375	41.9375	41.9375	
4	56.9375	56.9375	56.9375	
5	74.9375	74.9375	74.9375	
6	.0000	.0000	.0000	
7	.0000	.0000	.0000	
8	.0000	.0000	.0000	

I. JICE #05000198

TEST DATE: 01/23/97

EVERGREEN ENVIRONMENTAL SERVICES, INC.
19121-60th AVE. WEST #2
LYNNWOOD, WASHINGTON, 98036
(206) 712-8986

TANK STATUS EVALUATION REPORT

***** CUSTOMER DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97283-0018

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** SITE DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97231

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** COMMENT LINES *****

CURRENT EPA STANDARDS DICTATE
THAT FOR UNDERGROUND FUEL TANKS, THE MAXIMUM ALLOWABLE LEAK/GAIN RATE
OVER THE PERIOD OF ONE HOUR IS .05 GALLONS.

TANK #1: LUBE OIL 40 W TYPE: STEEL RATE: .035300 G.P.H. GAIN
TANK IS TIGHT.

TANK #2: LUBE OIL 30 W TYPE: STEEL RATE: .005110 G.P.H. GAIN
TANK IS TIGHT.

OPERATOR: FRANK NICHOLS

SIGNATURE: 

DATE: 1/23/97

***** C U S T O M E R D A T A *****

JOB NUMBER : 000198
 CUSTOMER (COMPANY NAME) : FOSS MARITIME
 CUSTOMER CONTACT(LAST, FIRST): CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97283-0018
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

***** C O M M E N T L I N E S *****

***** S I T E D A T A *****

SITE NAME (COMPANY NAME) : FOSS MARITIME
 SITE CONTACT(LAST, FIRST) : CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97231
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

 GROUND WATER LEVEL (FT) : 0

 NUMBER OF TANKS : 2

 LENGTH OF PRE-TEST (MIN) : 30
 LENGTH OF TEST (MIN) : 300

***** T A N K D A T A *****

	TANK NO. 1	TANK NO. 2	TANK NO. 3	TANK NO. 4
TANK DIAMETER (IN)	94	94		
LENGTH (FT)	16.64	16.64		
VOLUME (GAL)	6000	6000		
TYPE	ST	ST		
FUEL LEVEL (IN)	36	49.8		
FUEL TYPE	LUBE OIL 40 W	LUBE OIL 30 W		
dVOL/dy (GAL/IN)	79.01	81.12		
CALIBRATION ROD	DISTANCE			
1	10.6563	10.6563		
2	26.9531	26.9531		
3	41.9375	41.9375		
4	56.9375	56.9375		
5	74.9375	74.9375		
6	.0000	.0000		
7	.0000	.0000		
8	.0000	.0000		

VOICE #05000197

TEST DATE: 01/23/97

EVERGREEN ENVIRONMENTAL SERVICES, INC.
19121-60th AVE. WEST #2
LYNNWOOD, WASHINGTON, 98036
(206) 712-8986

TANK STATUS REPORT -- ULLAGE TEST

***** CUSTOMER DATA *****

***** SITE DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97283-0018

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97231

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** COMMENT LINES *****

CURRENT EPA STANDARDS DICTATE
THAT FOR UNDERGROUND FUEL TANKS, THE MAXIMUM ALLOWABLE LEAK/GAIN RATE
OVER THE PERIOD OF ONE HOUR IS .05 GALLONS.

TANK #1: DIESEL FUEL 2 TYPE: STEEL SN: .15

TANK IS TIGHT.


TANK #2: DIESEL FUEL 2 TYPE: STEEL SN: .21

TANK IS TIGHT.

TANK #3: REG UNLEADED TYPE: STEEL SN: .55

TANK IS TIGHT.

OPERATOR: FRANK NICHOLS

SIGNATURE: 

DATE: 1/23/97

***** C U S T O M E R D A T A *****

JOB NUMBER : 000197
 CUSTOMER (COMPANY NAME) : FOSS MARITIME
 CUSTOMER CONTACT(LAST, FIRST): CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97283-0018
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

***** C O M M E N T L I N E S *****

***** S I T E D A T A *****

SITE NAME (COMPANY NAME) : FOSS MARITIME
 SITE CONTACT(LAST, FIRST) : CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97231
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

 GROUND WATER LEVEL (FT) : 0

 NUMBER OF TANKS : 3

 LENGTH OF PRE-TEST (MIN) : 30
 LENGTH OF TEST (MIN) : 300

T A N K D A T A

	TANK NO. 1	TANK NO. 2	TANK NO. 3	TANK NO. 4
TANK DIAMETER (IN)	124	127	76	
LENGTH (FT)	31.88	30.39	8.49	
VOLUME (GAL)	20000	20000	2000	
TYPE	ST	ST	ST	
FUEL LEVEL (IN)	87	91.7	53.4	
FUEL TYPE	DIESEL 2	DIESEL 2	REG UNLD	
dVOL/dy (GAL/IN)	187.92	179.65	30.63	
CALIBRATION ROD	DISTANCE			
1	10.6563	10.6563	10.6563	
2	26.9531	26.9531	26.9531	
3	41.9375	41.9375	41.9375	
4	56.9375	56.9375	56.9375	
5	74.9375	74.9375	74.9375	
6	.0000	.0000	.0000	
7	.0000	.0000	.0000	
8	.0000	.0000	.0000	

VOICE #05000198

TEST DATE: 01/23/97

EVERGREEN ENVIRONMENTAL SERVICES, INC.
19121-60th AVE. WEST #2
LYNNWOOD, WASHINGTON, 98036
(206) 712-8986

TANK STATUS REPORT -- ULLAGE TEST

***** CUSTOMER DATA *****

***** SITE DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97283-0018

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97231

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** COMMENT LINES *****

CURRENT EPA STANDARDS DICTATE
THAT FOR UNDERGROUND FUEL TANKS, THE MAXIMUM ALLOWABLE LEAK/GAIN RATE
OVER THE PERIOD OF ONE HOUR IS .05 GALLONS.

TANK #1: LUBE OIL 40 W TYPE: STEEL SN: -1.48

TANK IS TIGHT.

TANK #2: LUBE OIL 30 W TYPE: STEEL SN: -1.17

TANK IS TIGHT.

OPERATOR: FRANK NICHOLS

SIGNATURE: 

DATE: 1/23/97

***** C U S T O M E R D A T A *****

JOB NUMBER : 000198
CUSTOMER (COMPANY NAME) : FOSS MARITIME
CUSTOMER CONTACT(LAST, FIRST): CABALLERO, RAFAEL
ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
ADDRESS - LINE 2 : P.O. BOX 83018
CITY, STATE : PORTLAND, OREGON
ZIP CODE (XXXXX-XXXX) : 97283-0018
PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

***** C O M M E N T L I N E S *****

***** S I T E D A T A *****

SITE NAME (COMPANY NAME) : FOSS MARITIME
SITE CONTACT(LAST, FIRST) : CABALLERO, RAFAEL
ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
ADDRESS - LINE 2 : P.O. BOX 83018
CITY, STATE : PORTLAND, OREGON
ZIP CODE (XXXXX-XXXX) : 97231
PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

GROUND WATER LEVEL (FT) : 0

NUMBER OF TANKS : 2

LENGTH OF PRE-TEST (MIN) : 30
LENGTH OF TEST (MIN) : 300

T A N K D A T A

	TANK NO. 1	TANK NO. 2	TANK NO. 3	TANK NO. 4
TANK DIAMETER (IN)	94	94		
LENGTH (FT)	16.64	16.64		
VOLUME (GAL)	6000	6000		
TYPE	ST	ST		
FUEL LEVEL (IN)	36	49.8		
FUEL TYPE	LUBE OIL 40 W	LUBE OIL 30 W		
dVOL/dy (GAL/IN)	79.01	81.12		

CALIBRATION ROD DISTANCE

1	10.6563	10.6563
2	26.9531	26.9531
3	41.9375	41.9375
4	56.9375	56.9375
5	74.9375	74.9375
6	.0000	.0000
7	.0000	.0000
8	.0000	.0000

I. OICE #05000197

TEST DATE: 01/23/97

EVERGREEN ENVIRONMENTAL SERVICES, INC.
19121-60th AVE. WEST #2
LYNNWOOD, WASHINGTON, 98036
(206) 712-8986

TANK STATUS EVALUATION REPORT

***** CUSTOMER DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97283-0018

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** SITE DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97231

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** COMMENT LINES *****

CURRENT EPA STANDARDS DICTATE
THAT FOR UNDERGROUND FUEL TANKS, THE MAXIMUM ALLOWABLE LEAK/GAIN RATE
OVER THE PERIOD OF ONE HOUR IS .05 GALLONS.

TANK #1: DIESEL FUEL 2 TYPE: STEEL RATE: .035299 G.P.H. GAIN

TANK IS TIGHT.

TANK #2: DIESEL FUEL 2 TYPE: STEEL RATE: .005110 G.P.H. GAIN

TANK IS TIGHT.

TANK #3: REG UNLEADED TYPE: STEEL RATE: .001650 G.P.H. GAIN

TANK IS TIGHT.

OPERATOR: FRANK NICHOLS

SIGNATURE: 

DATE: 1/23/97

***** C U S T O M E R D A T A *****

JOB NUMBER : 000197
 CUSTOMER (COMPANY NAME) : FOSS MARITIME
 CUSTOMER CONTACT(LAST, FIRST): CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97283-0018
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

***** C O M M E N T L I N E S *****

***** S I T E D A T A *****

SITE NAME (COMPANY NAME) : FOSS MARITIME
 SITE CONTACT(LAST, FIRST) : CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97231
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

GROUND WATER LEVEL (FT) : 0
 NUMBER OF TANKS : 3
 LENGTH OF PRE-TEST (MIN) : 30
 LENGTH OF TEST (MIN) : 300

***** T A N K D A T A *****

	TANK NO. 1	TANK NO. 2	TANK NO. 3	TANK NO. 4
TANK DIAMETER (IN)	124	127	76	
LENGTH (FT)	31.88	30.39	8.49	
VOLUME (GAL)	20000	20000	2000	
TYPE	ST	ST	ST	
FUEL LEVEL (IN)	87	91.7	53.4	
FUEL TYPE	DIESEL 2	DIESEL 2	REG UNLD	
dVOL/dy (GAL/IN)	187.92	179.65	30.63	
CALIBRATION ROD	DISTANCE			
1	10.6563	10.6563	10.6563	
2	26.9531	26.9531	26.9531	
3	41.9375	41.9375	41.9375	
4	56.9375	56.9375	56.9375	
5	74.9375	74.9375	74.9375	
6	.0000	.0000	.0000	
7	.0000	.0000	.0000	
8	.0000	.0000	.0000	

/OICE #05000198

TEST DATE: 01/23/97

EVERGREEN ENVIRONMENTAL SERVICES, INC.
19121-60th AVE. WEST #2
LYNNWOOD, WASHINGTON, 98036
(206) 712-8986

TANK STATUS EVALUATION REPORT

***** CUSTOMER DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97283-0018

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** SITE DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97231

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** COMMENT LINES *****

CURRENT EPA STANDARDS DICTATE
THAT FOR UNDERGROUND FUEL TANKS, THE MAXIMUM ALLOWABLE LEAK/GAIN RATE
OVER THE PERIOD OF ONE HOUR IS .05 GALLONS.

TANK #1: LUBE OIL 40 W TYPE: STEEL RATE: .035300 G.P.H. GAIN
TANK IS TIGHT.

TANK #2: LUBE OIL 30 W TYPE: STEEL RATE: .005110 G.P.H. GAIN
TANK IS TIGHT.

OPERATOR: FRANK NICHOLS

SIGNATURE: 

DATE: 1/23/97

***** C U S T O M E R D A T A *****

JOB NUMBER : 000198
 CUSTOMER (COMPANY NAME) : FOSS MARITIME
 CUSTOMER CONTACT(LAST, FIRST): CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97283-0018
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

***** C O M M E N T L I N E S *****

***** S I T E D A T A *****

SITE NAME (COMPANY NAME) : FOSS MARITIME
 SITE CONTACT(LAST, FIRST) : CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97231
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

GROUND WATER LEVEL (FT) : 0

NUMBER OF TANKS : 2

LENGTH OF PRE-TEST (MIN) : 30
 LENGTH OF TEST (MIN) : 300

***** T A N K D A T A *****

	TANK NO. 1	TANK NO. 2	TANK NO. 3	TANK NO. 4
TANK DIAMETER (IN)	94	94		
LENGTH (FT)	16.64	16.64		
VOLUME (GAL)	6000	6000		
TYPE	ST	ST		
FUEL LEVEL (IN)	36	49.8		
FUEL TYPE	LUBE OIL 40 W	LUBE OIL 30 W		
dVOL/dy (GAL/IN)	79.01	81.12		
CALIBRATION ROD	DISTANCE			
1	10.6563	10.6563		
2	26.9531	26.9531		
3	41.9375	41.9375		
4	56.9375	56.9375		
5	74.9375	74.9375		
6	.0000	.0000		
7	.0000	.0000		
8	.0000	.0000		

INVOICE #05000197

TEST DATE: 01/23/97

EVERGREEN ENVIRONMENTAL SERVICES, INC.
19121-60th AVE. WEST #2
LYNNWOOD, WASHINGTON, 98036
(206) 712-8986

TANK STATUS REPORT -- ULLAGE TEST

***** CUSTOMER DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97283-0018

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** SITE DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97231

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** COMMENT LINES *****

CURRENT EPA STANDARDS DICTATE
THAT FOR UNDERGROUND FUEL TANKS, THE MAXIMUM ALLOWABLE LEAK/GAIN RATE
OVER THE PERIOD OF ONE HOUR IS .05 GALLONS.

TANK #1: DIESEL FUEL 2 TYPE: STEEL SN: .15

TANK IS TIGHT.

TANK #2: DIESEL FUEL 2 TYPE: STEEL SN: .21

TANK IS TIGHT.

TANK #3: REG UNLEADED TYPE: STEEL SN: .55

TANK IS TIGHT.

OPERATOR: FRANK NICHOLS

SIGNATURE: 

DATE: 1/23/97

***** C U S T O M E R D A T A *****

JOB NUMBER : 000197
 CUSTOMER (COMPANY NAME) : FOSS MARITIME
 CUSTOMER CONTACT(LAST, FIRST): CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97283-0018
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

***** C O M M E N T L I N E S *****

***** S I T E D A T A *****

SITE NAME (COMPANY NAME) : FOSS MARITIME
 SITE CONTACT(LAST, FIRST) : CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97231
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

 GROUND WATER LEVEL (FT) : 0

 NUMBER OF TANKS : 3

 LENGTH OF PRE-TEST (MIN) : 30
 LENGTH OF TEST (MIN) : 300

***** T A N K D A T A *****

	TANK NO. 1	TANK NO. 2	TANK NO. 3	TANK NO. 4
TANK DIAMETER (IN)	124	127	76	
LENGTH (FT)	31.88	30.39	8.49	
VOLUME (GAL)	20000	20000	2000	
TYPE	ST	ST	ST	
FUEL LEVEL (IN)	87	91.7	53.4	
FUEL TYPE	DIESEL 2	DIESEL 2	REG UNLD	
dVOL/dy (GAL/IN)	187.92	179.65	30.63	
CALIBRATION ROD	DISTANCE			
1	10.6563	10.6563	10.6563	
2	26.9531	26.9531	26.9531	
3	41.9375	41.9375	41.9375	
4	56.9375	56.9375	56.9375	
5	74.9375	74.9375	74.9375	
6	.0000	.0000	.0000	
7	.0000	.0000	.0000	
8	.0000	.0000	.0000	

INVOICE #05000198

TEST DATE: 01/23/97

EVERGREEN ENVIRONMENTAL SERVICES, INC.
19121-60th AVE. WEST #2
LYNNWOOD, WASHINGTON, 98036
(206) 712-8986

TANK STATUS REPORT -- ULLAGE TEST

***** CUSTOMER DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97283-0018

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** SITE DATA *****

FOSS MARITIME
9030 N.W. ST. HELENS ROAD
P.O. BOX 83018
PORTLAND, OREGON
97231

CONTACT: CABALLERO, RAFAEL
PHONE #: 503/286-0631

***** COMMENT LINES *****

CURRENT EPA STANDARDS DICTATE
THAT FOR UNDERGROUND FUEL TANKS, THE MAXIMUM ALLOWABLE LEAK/GAIN RATE
OVER THE PERIOD OF ONE HOUR IS .05 GALLONS.

TANK #1: LUBE OIL 40 W TYPE: STEEL SN: -1.48

TANK IS TIGHT.

TANK #2: LUBE OIL 30 W TYPE: STEEL SN: -1.17

TANK IS TIGHT.

OPERATOR: FRANK NICHOLS

SIGNATURE: 

DATE: 1/23/97

***** C U S T O M E R D A T A *****

JOB NUMBER : 000198
 CUSTOMER (COMPANY NAME) : FOSS MARITIME
 CUSTOMER CONTACT(LAST, FIRST): CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97283-0018
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

***** C O M M E N T L I N E S *****

***** S I T E D A T A *****

SITE NAME (COMPANY NAME) : FOSS MARITIME
 SITE CONTACT(LAST, FIRST) : CABALLERO, RAFAEL
 ADDRESS - LINE 1 : 9030 N.W. ST. HELENS ROAD
 ADDRESS - LINE 2 : P.O. BOX 83018
 CITY, STATE : PORTLAND, OREGON
 ZIP CODE (XXXXX-XXXX) : 97231
 PHONE NUMBER (XXX)XXX-XXXX : 503/286-0631

 GROUND WATER LEVEL (FT) : 0

 NUMBER OF TANKS : 2

 LENGTH OF PRE-TEST (MIN) : 30
 LENGTH OF TEST (MIN) : 300

***** T A N K D A T A *****

	TANK NO. 1	TANK NO. 2	TANK NO. 3	TANK NO. 4
TANK DIAMETER (IN)	94	94		
LENGTH (FT)	16.64	16.64		
VOLUME (GAL)	6000	6000		
TYPE	ST	ST		
FUEL LEVEL (IN)	36	49.8		
FUEL TYPE	LUBE OIL 40 W	LUBE OIL 30 W		
dVOL/dy (GAL/IN)	79.01	81.12		
CALIBRATION ROD	DISTANCE			
1	10.6563	10.6563		
2	26.9531	26.9531		
3	41.9375	41.9375		
4	56.9375	56.9375		
5	74.9375	74.9375		
6	.0000	.0000		
7	.0000	.0000		
8	.0000	.0000		

TANK & LINES UPGRADES AND REPAIRS

ALL INFORMATION PERTAINING TO THE UPGRADING OR REPAIR OF YOUR SYSTEM SHOULD BE IN THIS SECTION, INCLUDING BUT NOT LIMITED TO:

- **ANY NEW DRAWINGS NEEDED**
- **PERMITS AND CHECK LISTS**
- **THIRD PARTY CERTIFICATIONS**
- **TESTING AFTER REPAIR OR UPGRADE**
- **EQUIPMENT LISTS**
- **DATE OF COMPLETION**
- **GARANTEES**
- **OPERATING INFORMATION**
- **COMPANY PERFORMING THE WORK**
 - **COPIES OF SERVICE PROVIDERS NUMBER AND SUPERVISOR NUMBER IF APPLICABLE**
 - **CONTRACTOR LICENSE NUMBER IF APPLICABLE**

PUT ANYTHING INTO THIS SECTION WHICH PERTAINS TO ANY SYSTEM CHANGES WHICH ARE NOW IN EFFECT

Certificate of Insurance Storage Tank Systems

Policy No.	Effective Date	Expiration Date
SEA 06-01	January 1, 2006	January 1, 2007

Named Insured and Mailing Address:
Foss Maritime Company
660 West Ewing Street
Seattle, WA 98119

Name of Insurer:
Navigators Insurance Company 95%
Millennium Syndicate 5%

CERTIFICATE

1. The "insurer" as identified able, hereby certified that it has issued liability insurance covering the following underground storage tanks:

Tank #	Cap. Gal.	Contents	Position
1	20,000	Diesel Oil, #2	Underground
2	20,000	Diesel Oil, #2	Underground
4	6,000	Lubricating Oil, 30 weight	Underground
Total	46,000		

For taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases; in accordance and subject to the limits of liability, exclusions, conditions and other terms of the policy; arising from operating the underground storage tank(s) identified above.

The limits of liability are \$1,000,000 each occurrence and \$2,000,000 annual aggregate, inclusive of legal defense costs.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1.
- Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this certificate applies.
 - The Insurer is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third party, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in 50 CFR 280.95-280.102.
 - Whenever requested by a Director of an implementing agency, the Insurer agreed to furnish the Director a signed duplicate original of the Policy and all endorsements.
 - Cancellation or any other termination of the insurance by the Insurer, except for non-payment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for non-payment of premium or misrepresentation by the Insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.
 - The insurance covers claims of otherwise covered by the Policy that are reported to the Insurer within six(6) months of the effective date of cancellation or non-renewal of the Policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reported period are subject to the terms, conditions, limits, including limits of liability, and exclusion of the policy.

I hereby certify that the wording of this instrument is identical to the wording in 40 CFR 280.97 (b) (7) and that the insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess lines insurer, in one or more states.

Navigators Insurance Company
Through Navigators Insurance Services of Washington

Authorized Representative

ORIGINAL

**On behalf of Navigator's Insurance Co. through
Navigators Insurance Services of Wa., Inc.**

MARSH

Marsh USA Inc.
1215 Fourth Avenue, Suite 2300
Seattle, WA 98161
carole.harris@marsh.com
www.marsh.com


Fax

To:	Mr. Mitch Scheel	From:	Carole M. Harris
Date:	January 09, 2006	Fax:	206 613 2512
Organization:	Oregon DEQ	Phone:	206 613 2662
Fax:	503 229 6954	Pages:	3
Phone:			
Subject:	Foss Maritime Company - Certificate(s) of Insurance		

At the request of our insured, Foss Maritime Company, we have issued the following Certificate(s) of Insurance for your records.

We trust you will find all in order but should you have any questions upon review, please do not hesitate to contact me.

Sincerely,



Carole M. Harris

Copy: Frank Williamson - Foss Maritime Company

document2

The documents accompanying this transmission contain confidential information, and may contain confidential health information, that is legally privileged. This information is intended only for the use of the individual or entity named above. The authorized recipient of this information is prohibited from disclosing this information to any other party unless required to do so by law or regulation and is required to destroy the information after its stated need has been fulfilled.

If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or action taken in reliance on the contents of these documents is strictly prohibited. If you have received this information in error, please notify the sender immediately and arrange for the return or destruction of these documents.



Marsh & McLennan Companies

Stu Sanborn

From: SCHEEL Mitch [SCHEEL.Mitch@deq.state.or.us]
Sent: Wednesday, January 11, 2006 2:12 PM
To: Stu Sanborn; Frank Williamson
Cc: SCHEEL Mitch
Subject: RE: DEQ Certificate of Insurance

Stu/Frank. I received appropriate FR verification from Carol Harris w/Marsh – DEQ ID #7374 is in compliance.

Thanks - Mitch

-----Original Message-----

From: SCHEEL Mitch
Sent: Monday, November 21, 2005 4:37 PM
To: 'Frank Williamson'
Cc: Stu Sanborn; SCHEEL Mitch
Subject: RE: DEQ Certificate of Insurance

Please review the documentation enclosed in the mailing you received. The only certificate I can use for verification per EPA is documented best in the fact sheet provided in the mailing. I cannot verify anything else.

Thanks - Mitch

-----Original Message-----

From: Frank Williamson [mailto:frankw@foss.com]
Sent: Monday, November 21, 2005 4:21 PM
To: SCHEEL Mitch
Cc: Stu Sanborn
Subject: RE: DEQ Certificate of Insurance

Mr. Scheel:

I must respectfully disagree with your statement that the certificate provided by Foss "does not indicate USTs are covered". In fact, in the Section entitled "Description of Operations/Locations/Vehicles/Special Items" of the certificate, the following language specifically referencing the USTs at the facility is included: "Coverage includes Sudden & Accidental Pollution Liability only at the following facility: 9030 NW St. Helens Rd., Portland, OR 97231. This facility includes three Underground Storage Tanks".

We arranged specially with our underwriters to have this language added to the certificate. Mr. Reiter of DEQ agreed last year that with this added language the certificate did meet the requirements of the applicable regulations. The certificate provided fully complies with the EPA requirements.

Please let me know if you have any further questions.

Frank Williamson

From: Stu Sanborn
Sent: Monday, November 21, 2005 4:10 PM
To: Frank Williamson
Subject: FW: DEQ Certificate of Insurance

-----Original Message-----

From: SCHEEL Mitch [mailto:SCHEEL.Mitch@deq.state.or.us]
Sent: Monday, November 21, 2005 4:01 PM
To: Stu Sanborn
Cc: SCHEEL Mitch
Subject: RE: DEQ Certificate of Insurance

Mr. Sanborn – Thank you for e-mailing me the certificate of insurance. Unfortunately, the document does not verify financial responsibility (FR) for your underground storage tanks (USTs). Although the document states that it is a “certificate of insurance”, it isn’t in the form of the required certificate of insurance for FR of USTs and only shows general liability and does not indicate USTs are covered.

What I need for verification is identified in the mailing you received. Please review the documentation and let me know if I can be of further assistance.

I appreciate your response and look forward to verifying the FR for Foss’s USTs soon.

Mitch Scheel
UST Policy Coordinator
Oregon DEQ
503.229.6704

-----Original Message-----

From: Stu Sanborn [mailto:stu@garth.foss.com]
Sent: Monday, November 21, 2005 3:48 PM
To: SCHEEL Mitch
Subject: FW: DEQ Certificate of Insurance

Mr. Scheel,

Please let me know wither way if the attached document meet the requirements.

Thanks so Much,
Stu Sanborn
Foss Maritime Company
Columbia and Snake Rivers
503 978-6745

-----Original Message-----

From: Frank Williamson
Sent: Monday, November 21, 2005 2:13 PM
To: Stu Sanborn (Stu Sanborn)
Subject: DEQ Certificate of Insurance

Stu:

Attached is the certificate we supplied to DEQ which is in effect until the end of this year. I suggest you contact him directly and offer to hand-deliver the certificate as we discussed. I agree that establishing some relationship would help avoid having this happen every year.

Thanks – let me know how it goes.

Frank

1/11/2006

Confidential Business Information

00014108

Frank Williamson
General Counsel
Foss Maritime Company
660 West Ewing Street
Seattle, Washington 98119
206-281-3891
206-281-5541(fax)

1/11/2006

Confidential Business Information

00014109

MARSH**Carole M. Harris**
Assistant Vice PresidentMarsh USA Inc.
1215 Fourth Avenue, Suite 2300
Seattle, WA 98161
206 613 2662 Fax 206 613 2512
carole.harris@marsh.com
www.marsh.com

October 30, 2003

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

Subject:

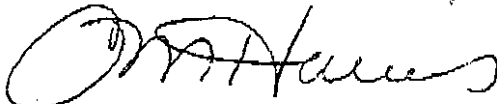
Certificate of Insurance - Foss Maritime Company

Dear Sir or Madam:

At the request of our client, Foss Maritime Company, we have issued the enclosed Original Certificate(s) of Insurance for your review.

We trust you will find this in order but if you should have any questions or comments, please direct them through Frank Williamson at Foss Maritime Company.

Best Regards,

Carole M. Harris
Assistant Vice PresidentCopy:
Frank Williamson
Dean Hunter

CERTIFICATE OF INSURANCE

Issued Date: 10/30/03

Marsh USA Inc.
1215 Fourth Avenue, Suite 2300
Seattle, Washington 98161

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER OTHER THAN THOSE PROVIDED IN THE POLICY. THIS CERTIFICATE DOES NOT AMEND, EXTEND, OR ALTER THE COVERAGE AFFORDED BY THE POLICIES LISTED HEREIN.

Companies Affording Coverage

COMPANY LETTER A Navigators Insurance Company

COMPANY LETTER B

COMPANY LETTER C

COMPANY LETTER D

Insured

Foss Maritime Company
 660 West Ewing Street
 Seattle, WA 98119-1587

Coverages

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED HEREIN HAVE BEEN ISSUED TO THE INSURED NAMED HEREIN FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THE CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES LISTED HEREIN IS SUBJECT TO ALL THE TERMS, CONDITIONS AND EXCLUSIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Co Ltr.	Type of Insurance	Policy Number	Policy Effective Date	Policy Expiration Date	Limits	
A	General Liability <input checked="" type="checkbox"/> Commercial General Liability <input type="checkbox"/> Claims Made <input checked="" type="checkbox"/> Occur. <input type="checkbox"/> Owner's Contract Prot. <input type="checkbox"/> <input type="checkbox"/>	SE03LIA 82498182	11/01/03	11/01/04	General Aggregate	\$ 2,000,000
					Products-Comp/Op Agg	\$ 1,000,000
					Personal & Adv Injury	\$ 1,000,000
					Each Occurrence	\$ 1,000,000
					Fire Damage (Any one fire)	\$ 50,000
					Med. Expense (Any one person)	\$ 5,000
	Automobile Liability <input type="checkbox"/> Any Auto <input type="checkbox"/> All Owned Autos <input type="checkbox"/> Scheduled Autos <input type="checkbox"/> Hired Autos <input type="checkbox"/> Non-Owned Autos				Combined Single Limit	\$
					Bodily Injury (Per person)	\$
					Bodily Injury (Per accident)	\$
					Property Damage	\$
	Garage Liability <input type="checkbox"/> Any Auto <input type="checkbox"/> GKLL <input type="checkbox"/>				Auto Only—Each Accident	\$
					Other Than Auto Only	\$
					Each Accident	\$
					Aggregate	\$
	Excess Liability <input type="checkbox"/> Umbrella Form <input type="checkbox"/> Other Than Umbrella Form				Each Occurrence	\$
					Aggregate	\$
	Workers' Compensation and Employers Liability Including USL&H				Statutory Limits	\$
					Each Accident	\$
					Disease—Policy Limit	\$
					Disease—Each Employee	\$
	Other				Liability Limit	\$

Description of Operations/Locations/Vehicles/Special Items

Coverage includes Sudden & Accidental Pollution Liability

Certificate Holder

Department of Environmental Quality
 811 SW Sixth Avenue
 Portland, OR 97204
 Attn:

Cancellation

SHOULD ANY OF THE POLICIES LISTED HEREIN BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE INSURER AFFORDING COVERAGE WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED HEREIN, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURED AFFORDING COVERAGE, ITS AGENTS OR REPRESENTATIVES, OR THE ISSUER OF THIS CERTIFICATE.

MARSH USA INC
 BY



STATE OF OREGON

Department of Environmental Quality

811 SW 6th Avenue, Floor 8

Portland OR 97204-1390

Phone: (503) 229-5913

Fax: (503) 229-6954



DATE 10-5-04

TO: Stuart Sabin

FAX: 503-289-7385

FROM: Rich Reiter (503-229-5733)

NUMBER OF PAGES INCLUDING COVER: 6

Stuart, attached please find

2 examples of Certificates that

satisfy the specific wording

requirements of 40 CFR 280.97(b)(2).

PLEASE CALL IF YOU HAVE ANY QUESTIONS

You'll notice the similarity of wording
except for insured, insurer and
facility location information.

Thanks for your assistance on this
matter. Rich

UST Facility ID # [REDACTED]

RER 7-12-04



Certificate Of Insurance Storage Tank Systems

ZURICH

Policy No.	Eff. Date of Pol.	Exp. Date of Pol.	Eff. Date of End.	Producer	Add'l Prem.	Return Prem.
[REDACTED]	09/01/03	09/01/04	09/01/03	11-971-000	60,498.00	

Named Insured and Mailing Address:

Producer:

Sub-Producer:

ELLIOTT, POWELL, BADEN & BAKER

1521 S.W. SALMON STREET

OR 87205

CERTIFICATE:

1. Zurich American Insurance Company, the Insurer, as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):

Per Attached Scheduled Locations and
Scheduled Storage Tank(s) Systems

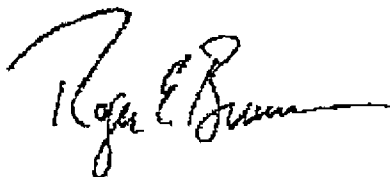
for taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases, in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; arising from operating the underground storage tank(s) identified above.

The limits of liability are \$ 1,000,000 each occurrence and \$ 5,000,000 annual aggregate, exclusive of legal defense costs which are subject to a separate limit under the policy. This coverage is provided under policy # [REDACTED]. The effective date of said policy is 09/01/03.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:
- Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this certificate applies.
 - The Insurer is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third party, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in 40 CFR 280.95-280.102.
 - Whenever requested by a Director of an implementing agency, the Insurer agrees to furnish to the Director a signed duplicate original of the Policy and all endorsements.
 - Cancellation or any other termination of the insurance by the Insurer, except for non-payment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for non-payment of premium or misrepresentation by the Insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.
 - The insurance covers claims otherwise covered by the Policy that are reported to the Insurer within six (6) months of the effective date of cancellation or non-renewal of the Policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy and which arise out of any covered occurrence that commenced

after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.

I hereby certify that the wording of this instrument is identical to the wording in 40 CFR 280.97 (b) (2) and that the insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.



Roger B. Brunner
Assistant Vice President
Authorized Representative of
Zurich American Insurance Company
One Liberty Plaza, 53rd Floor
New York, New York 10006

ID#

NAME

ADDRESS

TANK#	TF	INSTALL	RETRO	LIMITS	DEQ	CONTENTS	CAPACITY	CONSTRUCTION
00	UST	01/01/74	10/21/02	1,000,000/5,000,000	50,000	UNLEADED GASOL	10,000	STEEL- CAT# PRO
01	UST	01/01/74	10/21/02	1,000,000/5,000,000	50,000	UNLEADED GASOL	10,000	STEEL- CAT# PRO
02	UST	01/01/72	10/21/02	1,000,000/5,000,000	50,000	UNLEADED GASOL	10,000	STEEL- CAT# PRO
03	UST	01/01/52	10/21/02	1,000,000/5,000,000	50,000	UNLEADED GASOL	3,000	STEEL- CAT# PRO

CERTIFICATE OF INSURANCE*In Compt.
MRS**★ prev.
verified*

NAME: See Schedule of Facilities Endorsement (E038)

ADDRESS: See Schedule of Facilities Endorsement (E038)

POLICY NUMBER: [REDACTED]

PERIOD OF COVERAGE: 11/13/2003 TO 11/13/2004

NAME OF INSURER: COLONY INSURANCE COMPANY
9201 Forest Hill Avenue, Suite 200
Richmond, Virginia 23235
Tel. (800) 577-6614

NAME OF INSURED: [REDACTED] INC.

ADDRESS OF INSURED: [REDACTED]

CERTIFICATION:

1. COLONY INSURANCE COMPANY, the Insurer, as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):

See Schedule of Facilities Endorsement (E038)

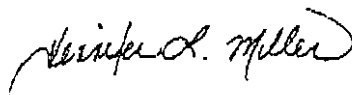
For "corrective action costs" and for "bodily injury" and "property damage" caused by either sudden accidental releases or non-sudden accidental releases or accidental releases, in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy arising from ownership, maintenance or use of the underground storage tank(s) identified above.

The Limits of Insurance are \$1,000,000.00 each occurrence and \$1,000,000.00 aggregate policy limit, exclusive of legal defense costs. This coverage is provided under [REDACTED]. The effective date of the policy is 11/13/2003.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:
- A. Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligations under the policy to which this certificate applies.
 - B. The insurer is liable for the payment of amounts within any deductible applicable to the policy to the party performing the corrective action and damages arising out of "bodily injury" or "property damage" for which the insured is legally liable, with a right of reimbursement from the insured for any such payment made by the insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in 40 CFR 280.95-280.102.

- C. Whenever requested by a director of an implementing agency, the insurer agrees to furnish to the Director a signed duplicate original of the policy and all endorsements.
- D. Cancellation or any other termination of the insurance by the insurer, except for non-payment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for non-payment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of 10 days after a copy of such written notice is received by the insured.
- E. The insurance covers claims otherwise covered by the policy that are reported to the insurer within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of insurance, and exclusions of the policy.

I hereby certify that the wording of this instrument complies with the wording in 40 CFR 280.97(b)(2) and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines Insurer, in one or more states.



Jennifer Miller
Authorized Representative of COLONY INSURANCE COMPANY
9201 Forest Hill Avenue, Suite 200
Richmond, Virginia 23235

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

FAX Transmittal Memorandum

No. of Pages: 1 + cover

Date: 5/13/04

To: <u>Stuart Sanborn</u> <u>DEQ ID # 7374</u>	From: <u>Mitch Scheel</u> Dept. of Environmental Quality 811 S. W. 6th Avenue Portland, OR 97204
Phone:	Phone: <u>503-229-6704</u>
FAX: <u>503-289-7385</u>	FAX: (503) 229-6954

Message:

Here's the "model" we discussed.
Let me know if you have any
questions.

Thanks,
Mitch

Model Of Certificate Of Insurance

Name: [name of each covered location]

Address: [address of each covered location]

Policy Number:

Period of Coverage, [current policy period]:

Name of [Insurer or Risk Retention Group]:

Address of [Insurer or Risk Retention Group]:

Name of Insured:

Address of Insured:

1. [Name of Insurer or Risk Retention Group], [the "Insurer" or "Group"], as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to 40 CFR 280.22, or the corresponding state requirement, and the name and address of the facility.]

for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the "per occurrence" and "annual aggregate" limits of the Insurer's or Group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The ["Insurer" or "Group"] further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the ["Insurer" or "Group"] of its obligations under the policy to which this certificate applies.

b. The ["Insurer" or "Group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third party,

with a right of reimbursement by the insured for any such payment made by the ["Insurer" or "Group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in 40 CFR 280.95-280.102.

c. Whenever requested by [a Director of an Implementing Agency], the ["Insurer" or "Group"] agrees to furnish to [the Director] a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the ["Insurer" or "Group"], except for non-payment of premium or misrepresentation of insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for non-renewal of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.

[insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the ["Insurer" or "Group"] within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arises out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting periods are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

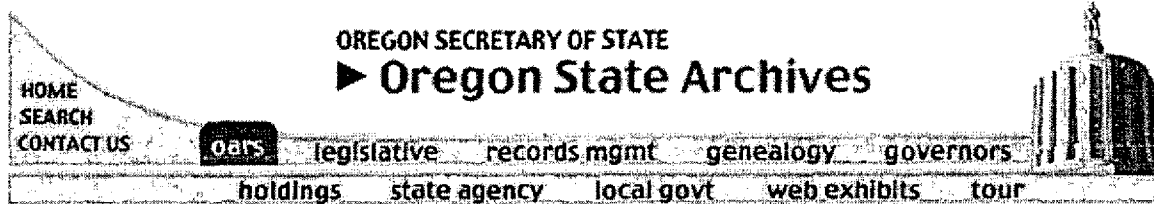
I hereby certify that the wording of this instrument is identical to the wording in 40 CFR 280.97(b)(1) and that the ["Insurer" or "Group"] is ["licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states".]

[Signature of authorized representative of Insurer or Risk Retention Group]

[Printed name of person signing]

[Title of person signing], Authorized Representative of
[name of Insurer or Risk Retention Group]

[Address of Representative]



The Oregon Administrative Rules contain OARs filed through April 15, 2004

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 151

FINANCIAL RESPONSIBILITY FOR USTS

340-151-0001

Purpose

The purpose of these rules is to protect public health, safety, welfare and the environment from the potential harmful effects of spills and releases of petroleum from USTs by requiring UST owners and permittees to maintain sufficient financial resources in the event that corrective action or compensation for bodily injury or property damage is required.

Stat. Auth.: ORS 466.746 & ORS 466.815

Stats. Implemented: ORS 466.815

Hist.: DEQ 6-2003, f. & cert. ef. 2-14-03

340-151-0010

Scope and Applicability

- (1) Except as provided in section (2), an owner and permittee of a petroleum UST system that meets the requirements of OAR 340-150-0006 and that is not exempted or deferred by 340-150-0008, must comply with this division.
- (2) State and federal government entities the debts and liabilities of which are the debts and liabilities of a state or the United States are exempt from the requirements of this division.
- (3) If the owner and permittee of a petroleum UST are separate persons, only one of them is required to demonstrate financial responsibility. Both are, however, jointly liable in the event of noncompliance. Regardless of which person complies, the date set for compliance at a particular UST facility is determined by the characteristics of the owner as set forth in 40 CFR § 280.91.

(4) Each chamber or compartment of a multichamber or multicompartment UST is an individual tank for the purpose of OAR chapter 340, divisions 150 and 151.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 466.746 & ORS 466.815

Stats. Implemented: ORS 466.815

Hist.: DEQ 6-2003, f. & cert. ef. 2-14-03

340-151-0015

Adoption and Applicability of United States Environmental Protection Agency Regulations

Except as otherwise modified or specified in this division, the rules of the United States Environmental Protection Agency governing the financial responsibility requirements for owners and operators of underground storage tanks in **Title 40 CFR, Part 280, Subpart H** in effect as of February 1, 2003 are adopted by the commission, incorporated by reference into this division, and applicable to all persons subject to this division. In addition to the Oregon-specific requirements in this division (OAR 340-151-0025), persons subject to this division must consult **40 CFR §§ 280.90** through 280.115 to determine applicable financial responsibility requirements.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 466.746 & ORS 466.815

Stats. Implemented: ORS 466.815

Hist.: DEQ 6-2003, f. & cert. ef. 2-14-03

340-151-0020

Definitions

The definitions and terms used in OAR 340-150-0010 and **40 CFR § 280.92** apply to this division.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 466.746 & ORS 466.815

Stats. Implemented: ORS 466.815

Hist.: DEQ 6-2003, f. & cert. ef. 2-14-03

340-151-0025

Oregon-Specific Financial Responsibility Requirements

The following rules in bold type substitute new language in lieu of or insert new language in addition to that in 40 CFR §§ 280.90 through 280.115:

(1) The term "owner and permittee" is substituted in lieu of the term "owner or operator" as that term is used throughout 40 CFR Part 280, Subpart H.

(2) The following terms are in addition to the definitions in 40 CFR § 280.92: "Owner" means a person

who currently owns an UST or owned an UST during the tank's operational life, including:

(a) In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use or dispensing of regulated substances; and

(b) In the case of an UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use. "Permittee" means the owner or person designated by the owner, who is in control of or has responsibility for daily UST system operation and maintenance, financial responsibility and UST operator training requirements under a general permit pursuant to OAR 340-150-0160 through 340-150-0168.

(3) The following requirement is in addition to 40 CFR § 280.97 (a) through (c):

(a) Each insurance policy or cover page must include the UST facility identification number issued by the department for each UST facility at which petroleum USTs are located.

(4) The following language is substituted in lieu of 40 CFR § 280.108 (b):

(a) After obtaining alternate financial assurance as specified in this subpart, an owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance. Within 30 days after a substitution is made, the owner and permittee must:

(A) Provide notice of cancellation of the previous financial assurance mechanism to the department and the former provider of financial assurance; and

(B) Provide a copy of the new financial responsibility mechanism to the department that demonstrates full compliance with the requirements of this division.

(5) The following requirement is in addition to the notice requirement in the first sentence of 40 CFR § 280.109 (a):

(a) Except as otherwise provided, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator., with a copy provided to the department by first class mail delivery.

(6) The following language is substituted in lieu of 40 CFR § 280.110(a)(1):

(a) Within 30 days after the owner or operator identifies a release from an underground storage tank required to be reported under §280.53 or §280.61 OAR 340-122-0205 through 340-122-0360.

(7) The following requirements are in addition to 40 CFR § 280.110(a)(1) through (a)(3):

(a) With an application to modify an UST general permit registration certificate as required by OAR 340-150-0052 for a change in owner or permittee; and

(b) Within 30 days after a new financial responsibility mechanism is obtained that replaces or substitutes for a previous mechanism as required by 40 CFR § 280.108.

(8) The following requirement is in addition to 40 CFR § 280.110(a) through (c):

(a) An owner and permittee or provider of financial assurance on their behalf, must notify the department by 15 days after the end of the previous month in which any of the following changes to a liability insurance policy (as amended by endorsement or certificate of insurance) occur as a result of actions by the owner, permittee or insurer:

(A) Cancellation;

(B) Failure to renew; or

(C) Issuance of a new or modified insurance policy.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 466.746 & ORS 466.815

Stats. Implemented: ORS 466.815

Hist.: DEQ 6-2003, f. & cert. ef. 2-14-03

The official copy of an Oregon Administrative Rule is contained in the Administrative Order filed at the Archives Division, 800 Summer St. NE, Salem, Oregon 97310. Any discrepancies with the published version are satisfied in favor of the Administrative Order. The Oregon Administrative Rules and the Oregon Bulletin are copyrighted by the Oregon Secretary of State. [Terms and Conditions of Use](#)

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UST Operator Training


Financial Responsibility

Ben Thomas Associates
Solutions for Underground Petroleum Storage Tank Systems


Listed


HAVE YOU CHECKED YOUR TANK TODAY?

Inspect and Maintain



Financial Responsibility

- **Mechanism options**
 - Private insurance, self insurance, others.
- **Amounts**
 - \$1M/occurrence, \$1M annual aggregate.
- **Coverage types**
 - Cleanup, off-site damages (not legal costs).
- **Coverage inexpensive these days.**
- **Liability:** Owner AND permittee if different.
- **Exempt:** State/Federal owners.



Financial Responsibility

- Documents to have ready for inspection:
 - Insurance policy
 - Self-insurance letter from CFO, or
 - Other documents.
- Provide proof to DEQ within 30 days if you
 - Discover a release,
 - Change ownership, or
 - Switch methods.



Financial Responsibility

- If any changes to insurance policy:
 - Notify DEQ within 15 days after date of effective change.
 - Permittee or insurer may notify.
 - Changes include policy modification, cancellation or non-renewal.
- You must maintain proof until:
 - Tank is closed and any contamination cleaned up to DEQ satisfaction.

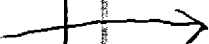


Financial Responsibility

- Make sure your policy covers UST pollution.

Should say "Underground Storage Tank" it in title.

Important language: "I hereby certify that the wording of this instrument is identical to the wording in 40 CFR 280.97(b)(2) and that the ["Insurer" or "Group"] is ["licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states"].



Financial Responsibility

- **Good Resources:**

- EPA's List of Known Insurance Providers for UST systems
- EPA's Dollars & Sense
- Your insurance broker
- Oregon Gasoline Dealers Association (www.ogda.org)





Oregon

Theodore R. Kulongoski, Governor

Department of Environmental Quality

811 SW Sixth Avenue
Portland, OR 97204-1390
503-229-5696
TTY 503-229-6993

November 15, 2005

Stuart Sanborn
Foss Maritime Company
9030 NW Saint Helens Road
Portland, OR 97231-1127

RE: Warning Letter with Opportunity to Correct – Failure to have Financial Responsibility
FOSS MARITIME
Facility ID # 7374
WL-HQ-LQ/T-2005-0013
By Certified Mail

Dear Stuart Sanborn:

Background

Underground storage tank (UST) owners and/or permittees must demonstrate that they have the financial resources (through insurance or other means) to pay the costs of cleaning up leaks and compensating third-parties for bodily injury and property damage caused by leaking USTs. In September 2002, the Department of Environmental Quality (Department) began verifying compliance with the requirements for Financial Responsibility (FR) for all regulated UST facilities in Oregon. Since that time, the Department has requested verification of FR for the above referenced facility on several occasions through both written requests and actual or attempted telephone contact. To date, the Department has not received the required verification of FR. As the registered owner and/or permittee for the UST facility referenced above, you are responsible for the following violation of Oregon environmental law:

VIOLATION:

Oregon Administrative Rule (OAR) 340-150-0135(3), CLASS I,
Failure to establish or maintain a Financial Responsibility mechanism.

Corrective Action Requested

Provide the Department with appropriate verification of Financial Responsibility by **December 15, 2005**. The enclosed "*Documenting Compliance with Financial Responsibility*" fact sheet and the "*Dollars and Sense – Financial Responsibility Requirements for Underground Storage Tanks*" publication, page 11, explains the most common form of documentation that must be provided to the Department.

Over

DEQ-1



Mail documentation to:

Department of Environmental Quality (DEQ)
Mitch Scheel
811 SW 6th Ave.
Portland, Oregon 97204

If you correct the violation cited above by providing the requested verification within the time frame outlined above, the Department will not take formal enforcement action on the violation. However, should this violation remain uncorrected, it will be referred to the Department's Office of Compliance and Enforcement for formal enforcement action, including assessment of a civil penalty, a Department order or the revocation of the permit to operate your UST system. Civil penalties can be assessed for each day of violation.

If you feel the Department has issued this Warning Letter in error, you may provide information to my attention at the address shown above to clarify the facts surrounding the alleged violation. If the Department determines that the violation was cited in error, the Department will amend or withdraw this Warning Letter. The Department endeavors to assist you in your compliance efforts. Should you have any questions about the content of this letter or desire any follow-up technical assistance, please contact me at 503-229-6704 or 1-800-452-4011 (in Oregon).

Sincerely,



Mitch Scheel
UST Policy Coordinator
Underground Storage Tank Program

Cc: Frank Williamson
660 W Ewing St.
Seattle, WA 98119

NWR Tanks Program

Office of Compliance and Enforcement, DEQ Headquarters

FINANCIAL RESPONSIBILITY

THIS SECTION SHOULD CONTAIN A COPY OF YOUR POLLUTION INSURANCE, OR DOCUMENTATION OF ONE OF THE OTHER METHODS OF MAINTAINING FINANCIAL RESPONSIBILITY FOR YOUR UST SYSTEM

**!!!MAKE SURE THAT THE WORDING
FOR YOUR METHOD IS WRITTEN IN
EXACT EPA LANGUAGE!!!**



Self insured people must have proof of self insurance test
see above pull info from web site fill out forms

INSURANCE

PER OCCURRENCE:

The amount of money that must be available to pay the costs for each occurrence of a leaking tank.

Facilities that handle an average of more than 10,000 gallons per month (based on annual throughput for previous calendar year)--\$1 MILLION.

Those handling less than 10,000 gallons
\$500,000

ANNUAL AGGREGATE:

The total amount available to cover all obligations that might occur in one year.

Depends on the number of tanks that is owned or operated:
to 100 tanks \$1 million— 101 or more tanks \$2 million
Each chamber of a compartmentalized tank is considered a tank.

These required amounts do not include legal defense costs.

NOTE: demonstrating financial responsibility for the required amounts of coverage does not limit an owner or operator's liability for corrective action and third party compensation.

Section 280.97 Insurance and risk retention group coverage.

(a) An owner or operator may satisfy the requirements of § 290.93 by obtaining liability insurance that conforms to the requirements of this section from a qualified insurer or risk retention group. Such insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.

(b) Each insurance policy must be amended by an endorsement worded as specified in paragraph (b)(1) of this section, or evidenced by a certificate of insurance worded as specified in paragraph (b)(2) of this section, except that instructions in brackets must be replaced with the relevant information and the brackets deleted:

(1) Endorsement

Name: [name of each covered location]

Address: [address of each covered location]

Policy Number:

Period of Coverage: [current policy period]

Name of [Insurer or Risk Retention Group]:

Address of [Insurer or Risk Retention Group]:

Name of Insured:

Address of Insured:

ENDORSEMENT:

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering the following underground storage tanks:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to 40 CFR 280.22, or the corresponding state requirement, and the name and address of the facility.]

for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's or Group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e);

a. Bankruptcy or insolvency of the insured shall not relieve the ["Insurer" or "Group"] of its obligations under the policy to which this endorsement is attached.

b. The ["Insurer" or "Group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third party, with a right of reimbursement by the insured for any such payment made by the ["Insurer" or "Group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in 40 CFR 280.95280.102.

c. Whenever requested by [a Director of an implementing agency], the ["Insurer" or "Group"] agrees to furnish to [the Director] a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the ["Insurer" or "Group"], except for nonpayment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for nonpayment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.

[Insert for claims made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the ["Insurer" or "Group"] within six months of the effective date of cancellation or nonrenewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of

the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in 40 CFR 280.97(b)(1) and that the ["Insurer" or "Group"] is ["licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states"].

[Signature of authorized representative of Insurer or Risk Retention Group]

[Name of person signing]

[Title of person signing], Authorized Representative of [name of Insurer or Risk Retention Group]

[Address of Representative]

(2) Certificate of Insurance

Name: [name of each covered location]

Address: [address of each covered location]

Policy Number:

Endorsement (if applicable):

Period of Coverage: [current policy period]

Name of [Insurer or Risk Retention Group]:

Address of [Insurer or Risk Retention Group]:

Name of Insured:

Address of Insured:

Certification:

1. [Name of Insurer or Risk Retention Group], [the "Insurer" or "Group"], as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s): [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to 40 CFR 280.22, or the corresponding state requirement, and the name and address of the facility.]

for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's or Group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The ["Insurer" or "Group"] further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the ["Insurer" or "Group"] of its obligations under the policy to which this certificate applies.

b. The ["Insurer" or "Group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third party, with a right of reimbursement by the insured for any such payment made by the ["Insurer" or "Group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in 40 CFR 280.95280.102.

c. Whenever requested by [a Director of an implementing agency], the ["Insurer" or "Group"] agrees to furnish to [the Director] a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the ["Insurer" or "Group"], except for nonpayment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for nonpayment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.

[Insert for claims made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the ["Insurer" or "Group"] within six months of the effective date of cancellation or nonrenewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in 40 CFR 280.97(b)(2) and that the ["Insurer" or "Group"] is ["licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states"]. [Signature of authorized representative of Insurer] [Type name]

[Title], Authorized Representative of [name of Insurer or Risk Retention Group] [Address of Representative]

(c) Each insurance policy must be issued by an insurer or a risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states.

(d) Each insurance policy or cover page must include the UST facility identification number issued by the department for each UST facility at which petroleum USTs are located.

[53 FR 43370, Oct. 26, 1988, as amended at 54 FR 47081, Nov. 9, 1989]

Must
Have
documents

Log procedures:

- [illegible]

Cathodic Protection Meter Log

Log procedures:

1. Record Volt and Amps at least every 60 days
 - a. Note changes in readings & look for trends.
 - b. Be especially on the lookout for drops in current.
2. Check the perimeter of tanks in the parking lot.
 - a. Look for any exposed wiring or damage to the system.

Date	Volts	Amps	Wiring
9/24/4	50	3.0	OK
11/15/4	50	3.0	OK
1/5/5	50	3.0	OK
2/15/5	50	3.0	OK
3/31/5	50	3.0	OK
5/27/5	50	3.6	OK
7/29/5	50	3.6	OK
9/15/5	53.2	3.6	OK
11/14/5	50	3.0	OK
12/13/5	50	3.0	OK
1/6/6	50	3.0	OK
2/7/6	50	3.0	OK
3/10/6	50	3.0	OK
4/7/6	50	3.0	OK
5/25/6	50	3.0	OK
6/26/6	50	3.3	OK
7/25/06	50	3.3	OK
8/18/06	50	3.3	OK
10/11/06	50	3.0	OK
11/3/06	50	3.0	OK
12/1/06	50	3.3	OK
1/5/07	50	3.0	OK
2/2/07	50	3.0	OK
3/2/07	50	3.0	OK
4/6/07	50	3.0	OK

Cathodic Protection Meter Log

Log procedures:

1. Record Volt and Amps at least every 60 days.
 - a. Note changes in readings & look for trends.
 - b. Be especially on the lookout for drops in current.
2. Check the perimeter of tanks in the parking lot.
 - a. Look for any exposed wiring or damage to the system.

[illegible]

Cathodic Protection Meter Log

Log procedures:

1. Record Volt and Amps at least every 60 days.
 - a. Note changes in readings & look for trends.
 - b. Be especially on the lookout for drops in current.
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 - a. Look for any exposed wiring or damage to the system.

- Log procedures:
1. Record Volt and Amps at least every 60 days.
 - a. Note changes in readings & look for trends.
 - b. Be especially on the lookout for drops in current.
 2. Check the perimeter of tanks in the parking lot.
 - a. Look for any exposed wiring or damage to the system.

[illegible]



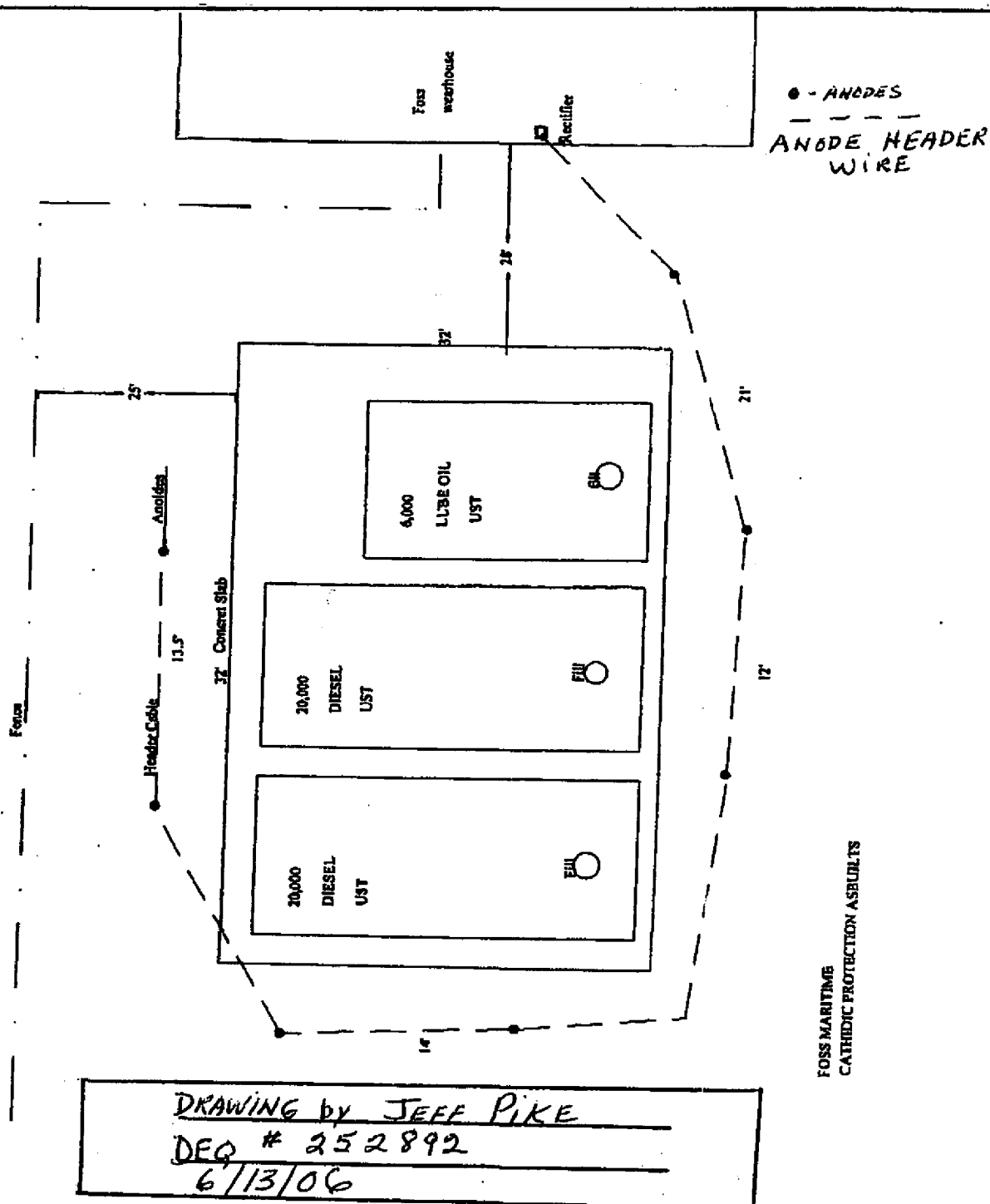
Corrosion Protection Services, LLC

20435 S. Leland Rd. Oregon City Or, 97045
(503) 655-9488 FAX (503) 655-6150

OR CCB: 153233 | WA REG: Corrops905RZ

Emerging Small Business #3440 | OAME Member | NFIB and BBB Member

Call Art Van Alstine



REC'D JUN 20 2006

Oregon Department of Environmental Quality Cathodic Protection Test Information Page

UST Owner		UST Facility	
NAME: <u>Foss Maritime</u>	NAME: <u>Foss Maritime</u>	ID# <u>25893</u>	
ADDRESS: <u>P.O. Box 83018</u>	ADDRESS: <u>9030 N.W. St Helens Rd</u>		
CITY: <u>Portland</u>	STATE: <u>OR</u>	CITY: <u>Portland</u>	STATE: <u>OR</u>
Cathodic Protection Tester			
TESTER'S NAME: <u>JEFFERY G PIKE</u>	CP TESTER'S LICENSE #: <u>26449</u>		
COMPANY NAME: <u>Pike's Unlimited</u>	EXPIRATION DATE: <u>5-18-2007</u>		
ADDRESS: <u>3258 Cascade Hwy NE</u>	PHONE NUMBER: <u>503-873-8070</u>		
CITY: <u>Silverton</u>	STATE: <u>OR</u>	NACE CERTIFICATION #: <u>10096</u>	
Cathodic protection system is: <input checked="" type="checkbox"/> Galvanic <input type="checkbox"/> Impressed current		Date Last Tested: <u>New Install</u>	
Weather Conditions at Time of Testing/Inspection: <u>Sunny</u>			
Temperature: <u>69</u> Soil/Backfill Conditions (circle): moist <u>dry</u> sand gravel <u>soil</u> Describe: <u>Imported soil for fill</u>			

Cathodic Protection System Certification

Identify which of the following testing situations is being recorded:

- ☐ Test required within 6 months of installation of CP system (installation date was 1/1/)
☐ Test required at least every 3 years after installation/test noted above
☐ Test required within 6 months of any repair activity

The cathodic protection system is effective, testing was performed according to NACE Standard RP-0285-2002, and is providing cathodic protection to all tanks and product lines: ☒ Yes ☐ No

Signature of Tester Jeffery G Pike

Date 7-24-06

UST SYSTEM INFORMATION

TANK #	YR TANK INSTALLED	CAPACITY	TANK MATERIAL	LINED? Y/N Date	YR CP INSTALLED	PIPING MATERIAL	YR CP INSTALLED
						<u>4" steel</u>	<u>2006</u>

UST SITE PLAN - On the back draw a diagram showing the important parts of the facility (tanks, lines, manway locations, turbines, vents, rectifier, pump islands, buildings). Indicate reference cell locations where structure-to-soil potential or continuity measurements have been made and label (R-1, R-2, R-3); location of all anodes and wires; location of CP test stations.

Facility Name Foss Maritime Test Date 7-24-06 Facility # 7374
25893

GALVANIC (SACRIFICIAL) CP TEST RESULTS REPORT PAGE

STRUCTURE TO SOIL POTENTIAL MEASUREMENTS

ID	STRUCTURE	CONTACT POINT	REFERENCE CELL ID	mV	COMMENTS
L3"	90° ELBO	4' Steel Pipe	Copper/Copper sulfate	-1.975	New install
M3"	90° ELBO	4' Steel Pipe	"	-1.975	for small
R2"	90° ELBO	4' Steel Pipe	"	-1.975	unprotected pipe

CP TEST STATION REQUIREMENTS

Have previous CP system test records been reviewed?

Has this CP test been performed consistent with previous CP system tests?

If test procedures have changed since last test please explain:

First test

Have potential measurements been made at all tanks and piping including any buried flex-connectors?

COMPLETE IF ANY REPAIRS OR MODIFICATIONS TO THE CP SYSTEM ARE MADE OR ARE NECESSARY

Describe any repairs or modifications to the cathodic protection system that are made or are necessary.

Galvanic anode was added to
three 4' steel pipe that were
not protected by impressed system.
See AS Built map for location.
6 month test needed on
Jan 24th.



OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Underground Storage Tank Program

UNDERGROUND STORAGE TANK SYSTEM
MODIFICATION AND ADDITION
REPORT AND CHECKLIST

Modification or addition work conducted at one UST facility may be reported together by completing pages 3, 4, 5, 6, and 7 once for the entire facility. Make additional copies of page 4, as needed.

1. UST SYSTEM PERMITTEE AND LOCATION (PLEASE PRINT):

DEQ Facility ID Number:

7374

DEQ UST Facility Name:

Foss Maritime

Facility (location) Address:

9030 N.W. St Helens Rd
Portland, OR 97283

UST permittee name:

Foss Maritime

Permittee mailing address:

P. Box 88018
Portland, OR 97283

Permittee Telephone:

2. TANK MODIFICATION OR ADDITION PERFORMED BY:

Service Provider: PIKE'S UNLIMITED DEQ License Number 25893

(Please Print)

Address: 3258 Cascade Ave NE Lic. Expiration Date: 4/27/07

Silverton, OR 97138

Telephone: 503-873-8070

Licensed Supervisor:

J. H. Pike
(Please Print)

DEQ License Number 26449

Lic. Expiration Date: 05-18-07

IMPORTANT NOTE REGARDING USE OF THIS PAGE (Page 4 of 7)

If the same work is completed on each tank and associated piping system, fill out this page just once. If different work is completed on each tank and associated piping system, make copies of this page and fill one out for each tank and associated piping system that has been modified, added to, or that has had metal underground piping and fittings repaired or replaced.

3. TANK AND ASSOCIATED PIPING SYSTEM INFORMATION

TANK #	DEQ-UST PERMIT #	TANK SIZE IN GALLONS	PRODUCT STORED		TYPE OF ASSOCIATED PIPING (i. e. metal, fiberglass, flexible, single-walled, double-walled, etc.)	
			CURRENT	FUTURE	CURRENT	FUTURE

4. MODIFICATION, ADDITION, AND METAL PIPING REPAIR OR REPLACEMENT INFORMATION (Please write a narrative description of the work that was completed).

Install Galvanic Protection on
 Three Steel Pipe approximately length
 4' each Concrete was poured over the
 Product Piping where they Transition
 From geo Fibre to Steel. This
 Section was missed at the
 initial install. DEQ Inspection
 Prompted the addition.

Jeff Pike

5. CHECKLIST: (Check YES or NO. Where a specific item is "not applicable" to the situation, please check the N/A box)

Was the DEQ Regional Office notified at least 30 days in advance of the planned modification or addition start date?

YES	NO	N/A
X		
X		
X		
X		
	X	
X		
		X
		X
		X
		X
		X
X		
X		

Was the DEQ Regional Office notified 72 hours in advance prior to beginning the modification or addition? If yes, indicate 3-day number issued: 115121

Was external cathodic protection (CP) installed, modified or added to?

Was a separate CP report submitted or attached?

Was a CP test station installed?

Is a 6-month CP follow-up inspection/test scheduled?

Projected inspection date: 1/24/06

Was a site assessment conducted?

Was contamination, including simple overfill, encountered and was it reported to DEQ? If so, indicate DEQ LUST number issued: _____

Were internal inspections of all USTs completed before filling began on any UST?

Have the results of the internal tank inspections been submitted to and/or discussed with DEQ?

If there were holes in any of the USTs, has a SUSPECTED release been reported to DEQ? If yes, indicate date reported: _____

Was the system tight-tested before placing back in service?

Do all tank and piping materials comply with OSHA 240-150-0300?

Have all items checked above been modified or added to in accordance with all codes, manufacturer's requirements and federal and state regulations? none

Has the UST system permittee been provided with written documentation of the item(s) modified or added to and has the permittee been instructed to preserve these records?

6. AS-BUILT DRAWING OF TANK SYSTEM MODIFICATION OR ADDITION

SEE attached.

Attach documentation, including equipment receipts, for any equipment that was modified or added, including the repair or replacement of metal piping and fittings.

Aug. 21 2006 02:10PM P7

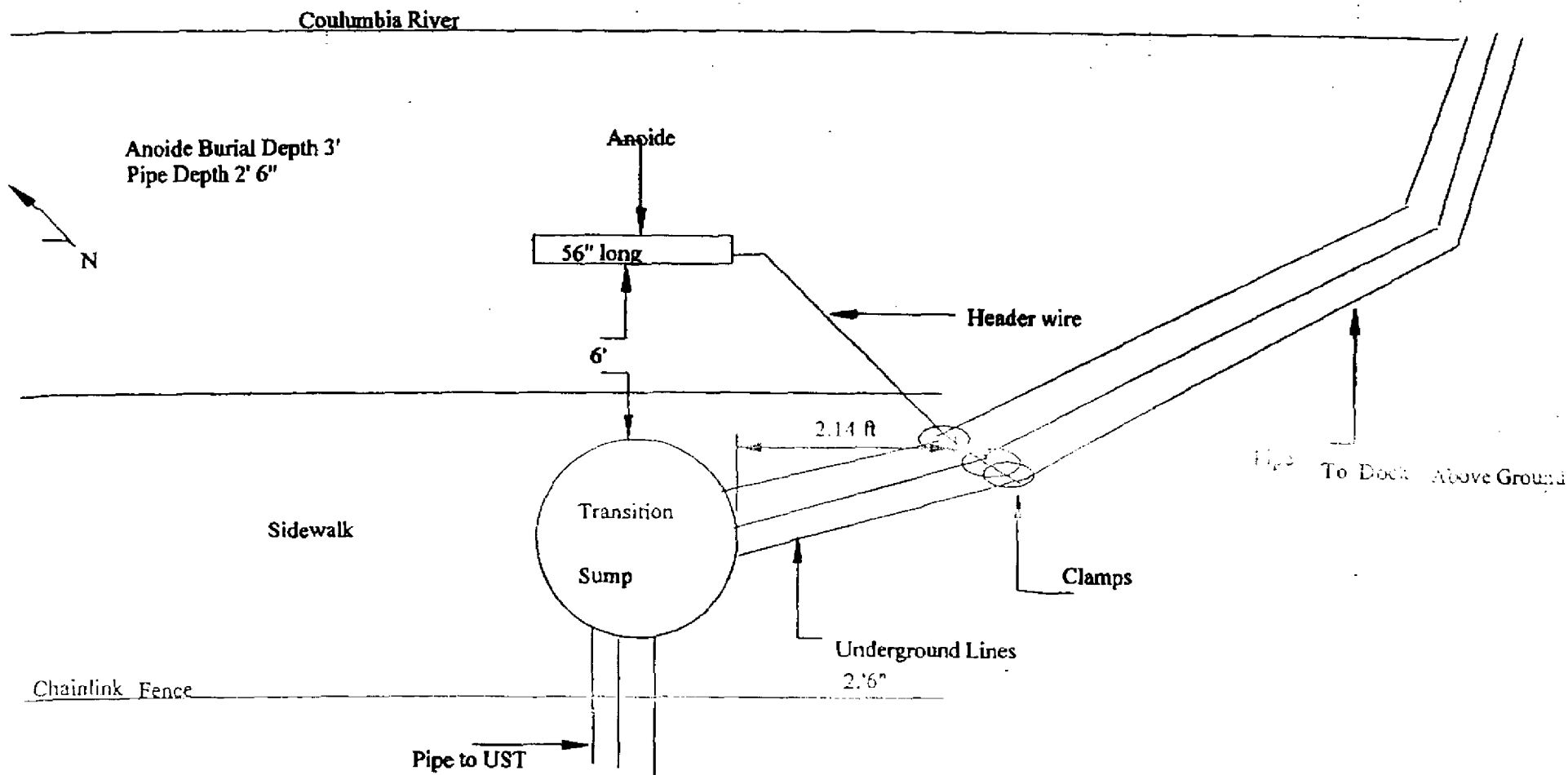
FAX NO. : 503 473 8070

FROM : PIKE'S UNLIMITED

Pike's Unlimited
3258 Cascade Hwy NE
Silverton, OR 97381
503-873-8070

TECH Jeff Pike

Parking
Area



DATE June 28th 2006

Location: Foss Maritime
9030 NW ST Helens RD
Portland, OR

7. SUPERVISOR'S OATH: I certify that I have been the Oregon DEQ licensed supervisor present on site during the above listed modification or addition work and to the best of my knowledge the work has been conducted in compliance with all local, state and federal laws, regulations and industry standards and procedures pertaining to underground storage tank systems. I further certify that the information contained in this report and checklist is true to the best of my belief and knowledge.

Supervisor: JEFF PIKE Jeff Pike
(Print Name) (Signature)

Service Provider: PIKE'S UNLIMITED Date: 7-24-06
UST Service Provider Firm, Executive Officer:

JEFF PIKE Jeff Pike 7-24-06
(Print Name) (Signature) (Date)

8. UST PERMITTEE MODIFICATION OR ADDITION CERTIFICATION STATEMENT:

I hereby certify that the information provided on this report and checklist concerning the modification or addition work on my tank and associated piping system is accurate.

Foss Maritime Jeff Pike 7-24-06
(Print Permittee Name) (Signature) (Date)

For information, call the appropriate DEQ Regional Office (see Page 2) or the toll free number, 1-800-742-7878. Two copies of this form must be turned within 30 days after the modification or addition work is completed to:

1. One copy to the appropriate DEQ Regional Office (see page 2)

Check ☐ Here that this copy has been mailed.

2. One copy to the UST Program Coordinator

Department of Environmental Quality

UST Program

811 SW 6th Ave.

Portland, OR 97204

Check ☒ Here that this copy has been mailed.

DEQ INSPECTIONS: DEQ inspectors are not required to inspect the modification or addition. Inspectors are for oversight purposes. A DEQ inspector is not required to inspect the modification or addition.

DEQ Inspector's Signature: _____ Inspection Date(s): _____

Corrosion Protection Services, LLC.

Invoice

P.O. Box 1374

Oregon City, OR 97045

CCB#153233- Reg#CORROPS985RZ

Phone: 503-655-9488 Fax: 503-655-6150



Date	Invoice #
6/10/2006	1545

Bill To
Foss Maritime Company 9030 N.W. St. Helens Road Portland, OR 97231

Ship To

P.O. No.	Terms	Salesperson	Ship Date	Ship Via
Linda Brown	Net 10 days	AGV	9/15/2005	CPS

Qty	Description	Unit Price	Total
	Cathodic Protection Testing with written report of test results and recommendations.	395.00	395.00
REC'D JUN 12 2006			
Total			\$395.00

A finance charge of 1 1/2% will be added to balances over 30 days past due.

Corrosion Protection Services, LLC

20435 S. Leland Rd, Oregon City, OR 97045

Phone: (503) 655-9488 Fax: (503) 655-8150

www.corrosionprotectionsservices.com

OR CCB: 163233 | WA REG: Corrops986RZ

Emerging Small Business #3440 | OAME Member | NFIB and BBB Member

Date: 6/22/2004

Contact: Linda Brown

Cell:

Account: Foss Maritime Co.

Address: 9030 N. W. St Helens Rd.

Phone: 503-978-6546

DEQ-DOE DEQ - # 7374

City/ST/Zip: Portland, OR 97231

Fax: 503-735-4976

Corrosion Test Monitoring Field Report

Equipment Data:	Rectifier: Benchmark Model BPS 72 volt 6 amperes 2-20,000 gal. Diesel, 1- 6,000 lube oil
------------------------	--

Output: 50.0 volts 3.8 amperes

Tap Settings: C - 3

Water Treatment:

Combustion:

Burner Service:

CP-Testing:

X

Analysis

City

Wel

Soft

TH

Mhös

Si

M-alk

P-all

Fe

Ph

Wt-Prod.

Inv/Ord

[illegible]

: Recommendations :

UST's are cathodically protected and are in DEQ compliance for corrosion control.

Customer Name: Linda Brown

CPS Tech Name: Roger Fernandez DEO # 15070

Customer Signature:

CPS Tech Signature:

Corrosion Protection Services, LLC.

P.O. Box 1374

Oregon City, OR 97045

CCB#153233- Reg#CORROPS985RZ

Phone: 503-655-9488 Fax: 503-655-6150



Invoice

Date	Invoice #
6/23/2004	1270

Bill To
Foss Maritime Company 9030 N.W. St. Helens Road Portland, OR 97231

Ship To

P.O. No.	Terms	Salesperson	Ship Date	Ship Via
Linda Brown	Net 10 days	AGV	6/22/2004	CPS

Qty	Description	Unit Price	Total
	Site Tank Farm Cathodic Protection Performance Test with written report of test results and recommendations.	395.00	395.00
<i>Be 525.53875</i> <i>— LPO</i>			

A finance charge of 1 1/2% will be added to balances over 30 days past due.

Total	\$395.00
--------------	-----------------



Corrosion Protection Services, LLC

20435 S. Leland Rd. Oregon City Or, 97045
(503) 655-9488 FAX (503) 655-6150
www.corrosionprotectionservices.com

OR CCB: 153233 | WA REG: Corrops985RZ

Emerging Small Business #3440 | OAME Member | NFIB and BBB Member

Call Art Van Alstine or Roger Fernandez

UST-Tank Services Contract

UST-Cathodic Protection-Internal Lining Inspection-Lining Repairs-Tank Video:

This contract is made and entered into this 10 day of August, 2004, by and between Corrosion Protection Services, LLC (Hereinafter referred to as "Contractor") & Owner: Foss Maritime Co. (Hereinafter referred to as owner) DBA as Same
Located at 9030 N.W. St. Helens Rd. Portland, Oregon 97231 Phone 503-998-6546 Fax 735-4976

Where as, the owner has decided to contract a DEQ Compliance Repair on 3 UST's at DEQ Facility # 7374 for sewing anode ground bed as per the scope of work outlined on the attached proposal (hereinafter as the Project). Name Contact: LINDA BROWN.

Where as, the contractor has submitted a proposal for the Project & a start time schedule of 8/21/04.

Where as the Owner is awarding a contract to the Contractor for the completion of the Project.

Now Therefore, in consideration of the promises, covenants and conditions contained herein and in the Contract Documents (as hereinafter defined), and the payments to be made hereunder, the Contractor & the Owner agree as follows: Contract Documents are # 1 through # 5.

Total Amount of Contract is: \$4,974.70 .1 with 50% Downpayment of \$2,474.70. placed with the order and the balance due of \$ 2,500. . upon Project completion.

1. Unusual circumstances are not part of this contract: such as: sludge in tanks, unusual weather conditions, power outages, accident on site by others and any other condition that restricts progress of the project will result in a change order signed by owner for additional compensation on a time and materials basis.
2. Contractor shall perform all work outlined by the scope of work in the proposal including but not limited to all labor, materials, tools, equipment necessary and incidental to the completion of project. Project to be completed to DOE/DEQ and National Association of Corrosion and Coating Engineers Standards and Specifications.
3. Completion of the project by the Contractor will be in a timely manner so as to have minimum down time and loss of business as possible.
4. Owner agrees to pay the Contractor for the performance of the work and any change orders, state/federal taxes, inspections or additional insured costs that may be incurred concerning the Project. All reports, drawings and DOE/DEQ performance data will be sent to the Owner by the Contractor when final payment is received. If attorney fees or court costs are incurred to enforce the provisions of this contract, such costs will be paid by the Owner and awarded to the Contractor.
5. Guarantee: Five years on Tank Lining Repairs and Cathodic Protection Rectifiers: 20 year life on anode groundbeds and one year on defects in workmanship and materials. Guarantee on repairs.

OWNER

Company: Foss Maritime Co.

CONTRACTOR

FID # 481277756

Corrosion Protection Services, LLC

P.O. # 515685

From: Art Van Alstine



20435 S. LELAND RD, OREGON CITY, OR 97045

(503) 655-9488 FAX (503) 655-6150

Call Art Van Alstine or Roger Fernandez

Bid Proposal:

1067 DEQ #7374

Emerging Small Business # 3440 | OAME Member | NFIB and BBB Member

Account: Foss Maritime Co.

Address: 9030 N.W. St. Helens Rd.

Cty/St/Zip: Portland, OR 97231

Contact: Linda Brown

Cell:

Phone: 503-978-6546


Fax: 503-735-4976

Project: UST- Cut Header cable

Address: Same

Cty/St/Zip:

Contact:



Corrosion Protection Services, LLC.

P.O. Box 1374

Oregon City, OR 97045

CCB#153233- Reg#CORROPS985RZ

Phone: 503-655-9488 Fax: 503-655-6150



Invoice

Date	Invoice #
6/16/2006	1546

Bill To
Foss Maritime Company 9030 N.W. St. Helens Road Portland, OR 97231

Ship To

P.O. No.	Terms	Salesperson	Ship Date	Ship Via
Linda Brown	Net 10 days	AGV	6/8/2006	CPS

Qty	Description	Unit Price	Total
	Cathodic Protection Annual DEQ Testing -2006	395.00	395.00
REC'D JUN 20 2006			

A finance charge of 1 1/2% will be added to balances over 30 days past due.

Total	\$395.00
--------------	-----------------



Corrosion Protection Services, LLC

20435 S. Leland Rd. Oregon City Or, 97045
(503) 655-9488 FAX (503) 655-6150

OR CCB: 153293 | WA REG: Corrops985RZ

Emerging Small Business #3440 | OAME Member | NFB and BBB Member

Call Art Van Alstine or Roger Fernandez

Fax Cover and Information Request

Date: 6/28/04 Fax#: 503-735-4976 Phone#: _____ Pages: 2

To: Anila Firm: Foss Maritime From: Art Van Alstine

Phone: 503-655-9488 Fax: 503-655-6150 < E-Mail: arturo110229@aol.com

*Forgot the report and Rogers' stamps
for (NACE) National Association of Corrosion
Engineers.*

*Thanks
Art*

*I stamped the proposal for your
presentation to management.*



Criterion Production Services, LLC

20435 S. Leland Rd, Oregon City, OR 97045

Phone: (503) 855-9488 Fax: (503) 855-8150
www.corrosionprotectionservices.com

OR CCB: 153233 | WA REG: Comops985RZ

Emerging Small Business #3440 | OAME Member | NFIB and BBB Member

Date: 6/22/2004

Contact: Linda Brown

Cell:

Account: Foss Maritime Co.

Address: 9030 N. W. St Helens Rd.

Phone: 503-978-6546

DEQ-DOE DEQ - # 7374

City/ST/Zip: Portland, OR 97231

Fax: 503-735-4976

Corrosion Test Monitoring Field Report

Equipment Data:	Rectifier: Benchmark Model BPS 72 volt	6 amperes 2-20,000 gal. Diesel, 1- 6,000 lube oil
-----------------	--	---

Output: 50.0 volts 3.8 amperes

Tap Settings: C - 3

Water Treatment:

Combustion:

Burner Service:

CP-Testing:

X

Analysis

City

Si

Wel

M-a

Soft

P-all

TH

Fe

Mhos

Ph

Wt-Prod.

Inv/Ord.

[illegible]

Recommendations :

UST's are cathodically protected and are in DEQ compliance for corrosion control.

Repairs Needed: The header cable for the 7 anodes is exposed in 12 different places & needs attention as soon as possible. All 7 anodes need to be re-spliced. This means to jack hammer an area over the anodes and also to re-sawcut the header cable trench for proper installation. All of this is done with special materials for underground burial and for resealing of the header cable. The next 3 years will be critical for this system, the potentials are very low for the age of this systc. Our design for 20 year anode grounded life for these 3 tanks would have been for a minimum of 10 anodes and possilby 12. Roger Fernandez N.A.C.E. certification # 3440

Customer Name: Linda Brown

CPS Tech Name: Roger Fernandez DEQ # 15070

Customer Signature:

CPS Tech Signature:

Date: 6/25/2004

From: Art Van Alstine

Bid Proposal:

1067 DEQ #7374



Corrosion Protection Services, LLC

20435 S. LELAND RD, OREGON CITY, OR 97045

(503) 655-9488 FAX (503) 655-6150

Call Art Van Alstine or Roger Fernandez

Emerging Small Business # 3440 | OAME Member | NFIB and BBB Member

Account: Foss Maritime Co.

Address: 9030 N.W. St. Helens Rd.

Cty/St/Zip: Portland, OR 97231

Contact: Linda Brown

Cell:

Phone: 503-978-6546

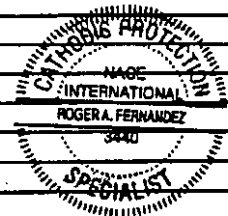
Fax: 503-735-4976

Project: UST- Cut Header cable

Address: Same

City/State/Zip:

Contact:

[illegible]

STATE OF OREGON CONSTRUCTION CONTRACTORS BOARD

LICENSE CERTIFICATE

This certifies that the person named hereon
is licensed as provided by law as a

General Contractor/All

EXEMPT

Limited Liability Company

License

Number: 153233

License

Expires: 10/23/2004

CORROSION PROTECTION SERVICES LLC

PO BOX 1374

OREGON CITY OR 97045

Arthur H. Van Houten

SIGNATURE OF LICENSEE

CKET
CARD

STATE OF OREGON

Licensed as: No. 153233

General Contractor/All

EXEMPT

Limited Liability Company

CORROSION PROTECTION SERVICES LLC

PO BOX 1374

OREGON CITY OR 97045

FOLD

CONSTRUCTION CONTRACTORS BOARD

Bond \$ 15000

Insurance AMERICAN STATES INS

01CE7601303

License Expires: 10/23/2004

Employer Accounts: ON FILE

DBA(S) ON FILE:

TACH
AND
ARRY
WITH
YOU



National Association of Corrosion Engineers

This certifies that

Roger Fernandez

*has satisfied
the requirements of the Association
for recognition as a*

Cathodic Protection Specialist



on the 12th day of April 19 91

number 3440

T. S. Lee

Executive Director

This certificate is the property of the National Association of Corrosion Engineers and must be surrendered when recognition ceases.
This certificate remains in force only as long as the above named person complies with the requirements of the program.
Confirm current status by contacting NACE, P. O. Box 218340, Houston, TX 77218 USA Telex: 782110 NACEHOU



Corrosion Protection Services, LLC

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OR CCB: 153233 | WA REG: Corrops985RZ

Emerging Small Business #3440 | OAME Member | NFIB and BBB Member

Call Art Van Alstine or Roger Fernandez

PRODUCT AND SERVICES LINE DATA

CPS, LLC since 1982 has serviced the needs of the UST-Program, Water Main & Natural Gas Utilities & HVAC Industries.
We supply Cathodic Protection Design, Materials, Testing, Repairs & Installations for DEQ & DOE Compliance.

We offer 10 & 5 year UST-Manned-Entry Interior Lining & Steel Tank Integrity Inspections for DEQ Compliance.
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DEQ/DOE - Service Providers License: Corrosion Protection Services, LLC.: # 10743: Expires 6-16-2006
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N.A.C.E. - Cathodic Protection & Exterior Coatings and Interior Lining Specialist # 3440: Expires 1-01-2008
DEQ/DOE - Cathodic Protection Technician Supervisor: Brian Van Alstine # 11471: Expires 5-04-2006
N.A.C.E. - Cathodic Protection & Coating Technician Certified: Brian Van Alstine # 5292: Expires 1/01/2009

Corrosion Protection Services, LLC-Oregon Contractors Board License # 153233: 10-23-04
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WE PROVIDE UST - TANK & LINE TIGHTNESS TESTING for DEQ/DOE COMPLIANCE IN OR.AND WA.

: Cathodic Protection References :

City of Beaverton: T-Mobil. 1.75 M gal.water tank , Bob George P.E. 503-526-2228
Leathers Oil Co. - Gresham OR - Harry Staten (503) 661-1244
Stein Oil Co. - Gladstone OR - Royal Proctor (503) 781-7668
Staub Oil Co. - Lakeview OR - David Staub (541) 947-2101
Cummings Transfer Co. - Albany OR - Mark Clement (541) 928-3386
Hattenhauer Distributors - The Dalles OR - Alex Hattenhauer (541) 296-3515
Truax Petroleum Co. - Corvallis OR - Russ Sternberg (541) 758-1500
Bend Oil Co. - Bend OR - Rob Nordby (541) 382-4751
Morse Bros. Sand & Gravel - Troutdale OR - Dave (503) 666-5577
Colvin Oil Co. - Grants Pass OR - Casey (541) 479-5343
American Energy - Bend OR - Greg Vernon (541) 383-3097
Black Oil Co. - Baker OR - Bob Black (541) 523-4575
Abbott Oil Co. - Bend OR - Jeff Abbott (541) 382-3961
ODOT Aviation Division - Independence and Cottage Grove - Dan Eavy (503) 378-8669 Ext. 2334
Deschutes County Public Works - Bend OR - Dennis Morris (541) 388-6581
City of Astoria - Astoria OR - Ken Cook (503) 325-3524
Veri-Tank Corp. (Watchdog Program) in Oregon, Washington, Idaho, & Montana Cathodic Protection Testing
on over 1000 Stip-3 Tanks in 2001 & 2002 - Leslie Kennedy (847) 438-8265 Ext. 248

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Design, Materials Installation, Test Monitoring and Repairs.

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EMERGING SMALL BUSINESS # 3440

< REFERENCES >

:Awarded & Completed Contracts for Cathodic Protection:

4/2004 - Oaklodge Sanitary District, 12 inch pipe protection: Triad Mechanical	> Cliff Frazer 503-289-9000
1/2004 - Six Pump Distribution Stations, City of Vancouver :Murray Smith & Assoc.	>Sandrine Ganry, 503-225-9010
4/2004 - St Charles Hospital, Bend, OR< 2 " Nat. Gas Line: Kinetic's Group Inc.	>Greg Cannon, 503-780-1301
4/2004 - Hudson Intertie, City of Portland, Bull Run Water Project : Moore Excavation	>Don Jandreau, 503-252-1180
4/2004 - Cornelius Pass Hwy 26 Interchange: City of Hillsboro : Kerr Contractors	>Alan Aplin, 503-692-5514
4/2004 - S. Waterfront Dist. Phase 1 & 2., 12 " pipeline : Williams & Ryan Const.	>Bill Webb, 503-350-1882
4/2004 - King's Heights, City of Portland, 12" pipeline : Werbin West Contracting	>J.F. Werbin, 503-888-9452
3/2004 - Street Car, Riverplace Ext. Pipeline and crossings: Werbin West Contracting	>J.F. Werbin, 503-888-9452
3/2004 - Albany-Millersberg, 2-300 ' deep wells & pipeline: RCI & R & G Excavating Inc	>Del Vidler, 1-503-931-7467
11/2003 -105 th & N. E. Clark St. Project : City of Portland : Nutter Underground Inc.	>Mike Brunnell, 1-360-907-9427
09/2003 - OHSU Pipeline Project, City of Portland: Coffman Excavating Inc.	>Jake Ausmus, 503-656-7000
04/2003 - 1.75 M Water Tank, Verizon Wireless T-Mobile USA-, City of Beaverton Project>	Bob George, 503-526-2792
01/2003- Kinsman Rd. Project: City of Wilsonville: : Kerr Contractors Inc	>Casey Carter, 503-969-1600
01/2003 - N.E. Oregon St. Project: City of Sherwood: : Copenhagen Utilities Inc.	>Duane Nelson, 503-654-3104
08/2002 - Tri-Met Interstate Max & 10 C Projects: City of Portland: : Dirt & Aggregate Inc.	>Warren Olson, 503-793-0369
03/2002 - Larson Intertie, City of Portland: Bull Run Water Project J.W. Fowler Co.	>Bob Canello 503-623-5373
05/2002 - City of Newport: Waste Water Pipe Protection: C & M Construction.	>Brian Belomo 503-625-5289
04/1997 - Tri-Met City of Hillsboro Max Line Emery and Sons	>Bill Martinak 503-769-7751

STU

Pike's Unlimited

3258 Cascade Hwy NE
Silverton, OR 97381

Phone Number 503-873-8070

Fax Number 503 873 4139

Web Address

Email

Fax Transmittal Form

To: Linda

Name:

CC:

Phone:

Fax:

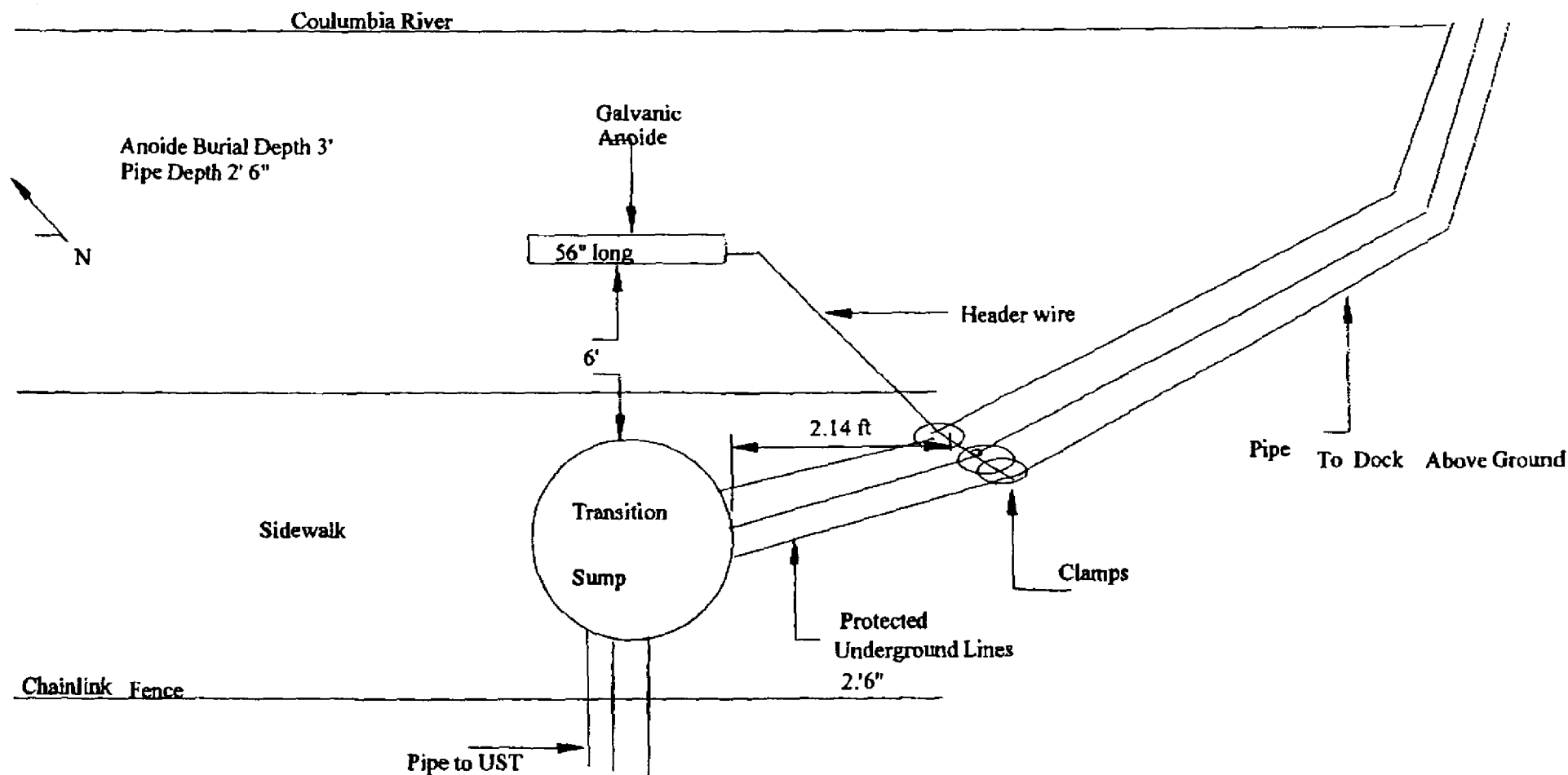
From: Jeff Pike

Date Sent:

Number of Pages:2

Message:**Hi Linda**

Here is the as built for the cp system. You should be ready for inspection
I had one with Greg Friday and discussed the Missing two month he was ok
With it. You will have no problem getting a A on the inspection.
Jeff



Pike's Unlimited
 3258 Cascade Hwy NE
 Silverton, OR 97381
 503-873-8070

TECH Jeff Pike

Parking
 Area

DATE June 28th 2006

Location: Foss Maritime
 9030 NW ST Helens RD
 Portland, OR

Galvanic CP Install



3rd Party
Certification
of
Monitor



Evaluation of the Incon Automatic Tank Gauging System for Monthly Monitoring on Underground Storage Tanks up to 30,000 gallons

(Models: TS-1000; TS-1001; TS-2001)

EPA Forms

**PREPARED FOR
Incon (Intelligent Controls, Inc.)**

May 14, 1998



Ken Wilcox Associates, Inc.
1125 Valley Ridge Drive, Grain Valley, MO 64029, USA
Voice (816) 443-2494, Fax (816) 443-2495
E-mail info@kwaleak.com, Web <http://www.kwaleak.com>

Preface

This report describes testing conducted on the Incon Automatic Tank Gauging System. The results of this evaluation apply to the following models: TS-1000; TS-1001; and TS-2001. This evaluation meets the requirements of the U.S. Environmental Protection Agency for Automatic Tank Gauging Systems for Monthly Monitoring for 0.2 gal/h leaks of Underground Storage Tanks up to 30,000 gallons in volume. The forms contained in this report are based on data collected using the EPA protocol "Standard Test Procedures for Evaluating Leak Detection Methods: Automatic Tank Gauging Systems", EPA/530/UST-90/006, March 1990. Ken Wilcox Associates, Inc. prepared this report and conducted all of the leak simulations, data collection, and data analysis.

The system also meets the National Work Group on Leak Detection Evaluations (NWGLDE)¹ requirements for Automatic Tank Gauging Systems for testing below the 50% product level.²

Volume 1 of this evaluation contains the Final Report and Volume 2 contains the Test Data. This report was prepared by Mr. Jeffrey K. Wilcox, Ken Wilcox Associates, Inc. Technical Questions regarding this evaluation should be directed to Mr. Michael Johnson, Incon (Intelligent Controls, Inc.), at (207) 283-0156.

KEN WILCOX ASSOCIATES, INC.

Jeffrey K. Wilcox, M.E.S.
Project Engineer

Approved:

H. Kendall Wilcox, Ph.D.
President

May 14, 1998

¹ The National Work Group for Leak Detection Evaluations consists of a group of State and Federal Regulators that review leak detection evaluations, new evaluation protocols, and other issues affecting the leak detection and underground storage tank industry.

² Letter from the Automatic Tank Gauge and Volumetric Tank Tightness Testing Committees of the NWGLDE to Gauge Vendors and other interested parties, April 28, 1997.

Results of U.S. EPA Standard Evaluation Automatic Tank Gauging System (ATGS)

This form tells whether the automatic tank gauging system (ATGS) described below complies with the performance requirements of the federal underground storage tank regulation. The evaluation was conducted by the equipment manufacturer or a consultant to the manufacturer according to the U.S. EPA's "Standard Test Procedure for Evaluating Leak Detection Methods: Automatic Tank Gauging Systems." The full evaluation report also includes a form describing the method and a form summarizing the test data.

Tank owners using this leak detection system should keep this form on file to provide compliance with the federal regulations. Tank owners should check with State and local agencies to make sure this form satisfies their requirements.

ATGS Description

Name Incon Automatic Tank Gauging System
Version number TS-1000; TS-1001; TS-2001
Vendor Incon, Inc. (Intelligent Controls)
74 Industrial Park Road
(street address)
Saco, Maine 04072 (207) 283-0156
(city) (state) (zip) (phone)

Evaluation Results

This ATGS which declares tank to be leaking when the measured leak rate exceeds the threshold of 0.10 gallon per hour, has a probability of false alarms [P_{FA}] of 4.3 %.

The corresponding probability of detection [P_D] of a 0.20 gallon per hour leak is 95.7 %.

The minimum water level (threshold) in the tank that the ATGS can detect is 0.208 inch.

The minimum change in water level that can be detected by the ATGS is 0.011 inches (provided that the water level is above the threshold).

Therefore, this ATGS (X) does () does not meet the federal performance standards established by the U.S. Environmental Protection Agency (0.20 gallon per hour at P_D of 95% and P_{FA} of 5%), and this ATGS (X) does () does not meet the federal performance standard of measuring water in the bottom of the tank to the nearest 1/8 inch.

Test Conditions During Evaluation

The evaluation testing was conducted in a 20,000 gallon () steel (X) fiberglass tank that was 120 inches in diameter and 453 inches long.

The temperature difference between product added to fill the tank and product already in the tank ranged from -6.9 deg F to +5.6 deg F, with a standard deviation of 5.2 deg F.

The tests were conducted with the tank product levels 50 to 95 % full.

The product used in the evaluation was diesel fuel.

Name of ATGS Incon Automatic Tank Gauging System

Version TS-1000; TS-1001; TS-2001

Limitations on the Results

The performance estimates above are only valid when:

- ☐ The method has not been substantially changed.
- ☐ The vendor's instructions for installing and operating the ATGS are followed.
- ☐ The tank contains a product identified on the method description form.
- ☐ The tank is no larger than 30,000 gallons.
- ☐ The tank is at least See Note Below¹ percent full.
- ☐ The waiting time after adding any substantial amount of product to the tank is 4² hours.
- ☐ The temperature of the added product does not differ more than ±7.8 degrees Fahrenheit from that already in the tank.
- ☐ The total data collection time for the test is at least See note below³ hours.
- ☐ Other limitations specified by the vendor of determined during testing:

none

> **Safety disclaimer: This test procedure only addresses the issue of the ATG system's ability to detect leaks. It does not test the equipment for safety hazards.**

Certification of Results

I certify that the ATGS was installed and operated according to the vendor's instructions and that the results presented on this form are those obtained during the evaluation. I also certify that the evaluation was performed according to one of the following:

- (X) standard EPA test procedure for ATGS
() alternative EPA test procedure for ATGS

H. Kendall Wilcox, Ph.D., President
(printed name)

(signature)

May 14, 1998
(date)

Ken Wilcox Associates, Inc.
(organization performing evaluation)

Grain Valley, Missouri 64029
(city, state, zip)

(816) 443-2494
(phone number)

¹ Ten percent is the minimum percent full for conducting a valid test on the tank used in the evaluation. The minimum product level at which a valid test can be conducted is dependent on the length of the probe. See the attached table for a list of probe lengths and their respective minimum test levels.

² Waiting times after deliveries ranged from 2 hrs 58 minutes to 6 hrs and averaged 4 hrs 9 minutes.

³ The Incon ATGS automatically determines the length of the test based upon the quality of the test data. Test times for this evaluation ranged from 6 hrs 19 minutes to 8 hrs and averaged 6 hrs 51 minutes. Test times will generally be longer for larger tanks.

Reporting Form for Leak Rate Data Automatic Tank Gauging System (ATGS)

ATGS Name and Version: Incon ATGS Models: TS-1000; TS-1001; TS-2001

Evaluation Period: from 19-Dec-96 to 15-Sept-97 (Dates)

Test No.	Date at Completion of Last Fill (d-m-y)	Time at Completion of Last Fill (military)	Date Test Began (d-m-y)	Time Test Began (military)	Time Test Ended (military)	Product Temperature Differential (deg F)	Nominal Leak Rate (gal/h)	Induced Leak Rate (gal/h)	Measured Leak Rate (gal/h)	Meas.-Ind. Leak Rate (gal/h)
1	19-Dec-96	1238	19-Dec-96	1638	2306	-0.4	0.2	-0.206	-0.21	-0.004
2	19-Dec-96	1238	20-Dec-96	0038	0659	-0.4	0	0.000	0.02	0.020
3	Test aborted due to test site operational problems - Replaced by Test 21.									
4	Test aborted due to test site operational problems - Replaced by Test 22.									
5	28-Dec-96	1630	28-Dec-96	2030	0430	5.6	0.1	-0.091	-0.07	0.021
6	28-Dec-96	1630	29-Dec-96	1107	1842	5.6	0.2	-0.168	-0.23	-0.062
7	29-Dec-96	2035	29-Dec-96	2330	0549	5.6	0	0.000	0.02	0.020
8	29-Dec-96	2035	30-Dec-96	1058	1718	5.6	0.3	-0.257	-0.33	-0.073
9	30-Dec-96	1835	30-Dec-96	2235	0454	-6.9	0.3	-0.295	-0.19	0.105
10	30-Dec-96	1835	31-Dec-96	0846	1506	-6.9	0.2	-0.180	-0.21	-0.030
11	31-Dec-96	1620	31-Dec-96	2020	0239	-6.9	0.1	-0.087	-0.05	0.037
12	31-Dec-96	1620	01-Jan-97	1105	1724	-6.9	0	0.000	-0.01	-0.010
13	02-Jan-97	1009	02-Jan-97	1307	1927	-0.4	0.3	-0.244	-0.21	0.034
14	02-Jan-97	1009	02-Jan-97	2200	0559	-0.4	0.1	-0.152	-0.18	-0.028
15	03-Jan-97	1054	03-Jan-97	1200	1800	-0.4	0	0.000	-0.03	-0.030
16	03-Jan-97	1054	03-Jan-97	2100	0459	-0.4	0.1	-0.137	-0.18	-0.043
17	12-Jan-97	1737	12-Jan-97	1950	0210	-0.4	0.2	-0.243	-0.13	0.113
18	12-Jan-97	1737	13-Jan-97	0757	1417	-0.4	0.3	-0.298	-0.32	-0.022
19	13-Jan-97	1930	14-Jan-97	0130	0749	5.1	0.3	-0.303	-0.38	-0.077
20	13-Jan-97	1930	14-Jan-97	0754	1413	5.1	0	0.000	-0.04	-0.040
21	14-Jan-97	1525	14-Jan-97	1737	2356	5.1	0.2	-0.183	-0.11	0.073
22	14-Jan-97	1525	15-Jan-97	0300	0919	5.1	0.1	-0.077	-0.09	-0.013
23	13-Sep-97	1500	13-Sep-97	1900	0259	-5.8	0	0.000	-0.04	-0.040
24	13-Sep-97	1500	14-Sep-97	0510	1309	-5.8	0.1	-0.110	-0.11	0.000
25	14-Sep-97	2025	15-Sep-97	0025	0824	-5.8	0.2	-0.189	-0.11	0.079
26	14-Sep-97	2025	15-Sep-97	1022	1822	-5.8	0.3	-0.277	-0.39	-0.113

Description

Automatic Tank Gauging System

This section describes briefly the important aspects of the automatic tank gauging system (ATGS). It is not intended to provide a thorough description of the principles behind the system or how the equipment works.

ATGS Name and Version

Incon Automatic Tank Gauging System Models: TS-1000; TS-1001; TS-2001

Product

> Product type

For what products can this ATGS be used? (check all applicable)

☒ gasoline

☒ diesel

☒ aviation fuel

☒ fuel oil #4

☐ fuel oil #6

☒ solvents

☒ waste oil

☒ other (list) Solvents compatible with sensors and with known coefficients of expansion and densities. Contact manufacturer for specific applications.

> Product level

What product level is required to conduct a test?

☐ greater than 90% full

☐ greater than 50% full

☒ other (specify) Dependent on probe length - see attached table

Does the ATGS measure inflow of water as well as loss of product (gallon per hour)?

☒ yes

☐ no

Does the ATGS detect the presence of water in the bottom of the tank?

☒ yes

☐ no

Level Measurement

What technique is used to measure changes in product volume?

- ☐ directly measure the volume of product change
- ☐ changes in head pressure
- ☐ changes in buoyancy of a probe
- ☐ mechanical level measure (e.g., ruler, dipstick)
- ☐ changes in capacitance
- ☐ ultrasonic
- ☒ change in level of float (specify principle, e.g., capacitance, magnetostrictive, load cell, etc.) Magnetostrictive
- ☐ other (describe briefly) _____

Temperature Measurement

If product temperature is measured during a test, how many temperature sensors are used?

- ☐ single sensor, without circulation
- ☐ single sensor, with circulation
- ☐ 2-4 sensors
- ☒ 5 or more sensors
- ☐ temperature-averaging probe

If product temperature is measured during a test, what type of temperature sensor is used?

- ☒ resistance temperature detector (RTD)
- ☐ bimetallic strip
- ☐ quartz crystal
- ☐ thermistor
- ☐ other (describe briefly) _____

If product temperature is not measured during a test, why not?

- ☐ the factor measured for change in level/volume is independent of temperature (e.g., mass)
- ☐ the factor measured for change in level/volume self-compensates for changes in temperature
- ☐ other (explain briefly) _____

Data Acquisition

How are the test data acquired and recorded?

- ☐ manually
- ☐ by strip chart
- ☒ by computer

Procedure information

> Waiting times

What is the minimum waiting period between adding a large volume of product (i.e., a delivery) and the beginning of a test (e.g., filling from 50% to 90-95% capacity)?

- ☐ no waiting period
- ☐ less than 3 hours
- ☒ 3-6 hours
- ☐ 7-12 hours
- ☐ more than 12 hours
- ☐ variable, depending on tank size, amount added, operator discretion, etc.

> Test duration

What is the minimum time for collecting data?

- ☐ less than 1 hour
- ☐ 1 hour
- ☐ 2 hours
- ☐ 3 hours
- ☐ 4 hours
- ☒ 5-10 hours
- ☐ more than 10 hours
- ☐ variable (explain) _____

> Total time

What is the total time needed to test with this ATGS after a delivery?
(waiting time plus testing time)

10 hours 0 minutes (Assumes 4 hour waiting time and 6 hour testing time)

What is the sampling frequency for the level and temperature measurements?

☒ (X) more than once per second

☐ () at least once per minute

☐ () every 1-15 minutes

☐ () every 16-30 minutes

☐ () every 31-60 minutes

☐ () less than once per hour

☐ () variable (explain) _____

> Identifying and correcting for interfering factors

How does the ATGS determine the presence and level of the ground water above the bottom of the tank?

☒ (X) observation well near tank

☐ () information from USGS, etc.

☒ (X) information from personnel on-site

☒ (X) presence of water in the tank

☐ () other (describe briefly) _____

☐ () level of ground water above bottom of the tank not determined

How does the ATGS correct for the interference due to the presence of ground water above the bottom of the tank?

☒ (X) system tests for water incursion

☐ () different product levels tested and leak rates compared

☐ () other (describe briefly) _____

☐ () no action

How does the ATGS determine when tank deformation has stopped following delivery of product?

☒ (X) wait a specified period of time before beginning test

☐ () watch the data trends and begin test when decrease in product level has stopped

☐ () other (describe briefly) _____

☐ () no procedure

Are the temperature and level sensors calibrated before each test?

☐ yes

☒ no

If not, how frequently are the sensors calibrated?

☐ weekly

☐ monthly

☐ yearly or less frequently

☒ never

> Interpreting test results

How are level changes converted to volume changes (i.e., how is height-to-volume conversion factor determined)?

☐ actual level changes observed when known volume is added or removed (e.g., liquid metal bar)

☒ theoretical ratio calculated from tank geometry

☒ interpolation from tank manufacturer's chart

☐ other (describe briefly)

☐ not applicable; volume measured directly

How is the coefficient of thermal expansion (C_e) of the product determined?

☐ actual sample taken for each test and C_e determined from specific gravity

☒ value supplied by vendor of product

☒ average value for type of product

☐ other (describe briefly) _____

How is the leak rate (gallon per hour) calculated?

☐ average of subsets of all data collected

☐ difference between first and last data collected

☐ from data from last _____ hours of test period

☒ from data determined to be valid by statistical analysis

☐ other (describe) _____

What threshold value for product volume change (gallon per hour) is used to declare that a tank is leaking?

- ☐ 0.05 gallon per hour
- ☒ 0.10 gallon per hour (for Monthly Monitoring)
- ☐ 0.20 gallon per hour
- ☐ other (list) _____

Under what conditions are test results considered inconclusive?

- ☒ too much variability in the data (standard deviation beyond a given value)
- ☐ unexplained product volume increase
- ☐ other (describe briefly) _____

Exceptions

Are there any conditions under which a test should not be conducted?

- ☐ water in the excavation zone
- ☐ large difference between ground temperature and delivered product temperature
- ☐ extremely high or low ambient temperature
- ☐ invalid for some products (specify) _____
- ☒ other (describe briefly) none _____

What are acceptable deviations from the standard testing protocol?

- ☒ none
- ☐ lengthen the duration of test
- ☐ other (describe briefly) _____

What elements of the test procedure are determined by personnel on-site?

- ☒ product level when test is conducted
- ☒ when to conduct test
- ☐ waiting period between filling tank and beginning test
- ☐ length of test
- ☐ determination that tank deformation has subsided
- ☐ determination of "outlier" data that may be discarded
- ☐ other (describe briefly) _____
- ☐ none

Attachment 1

Results of U.S. EPA Standard Evaluation Automatic Tank Gauging System (ATGS)

Standard Lengths for Incon Probes (Low level testing information)

Standard Probe Length	Tank Diameter	Lowest Temperature Sensor from End of Shaft	Lowest Product Level for Valid Testing
29	24	2.68	8.68
41	36	4.15	10.15
53	48	5.62	11.62
57	52	6.1	12.1
69	64	7.57	13.57
77	72	8.55	14.55
81	76	9.04	15.04
89	84	10.01	16.01
101	96	11.48	17.48
113	108	12.95	18.95
125	120	14.41	20.41
131	126	15.15	21.15
137	132	15.88	21.88
149	144	17.35	23.35

linda

From: DeVinney, Kevin [devinney@franklinfueling.com]
Sent: Monday, May 15, 2006 1:50 PM
To: linda@foss.com
Cc: Knapp, Andrew
Subject: RE: INCON General Contact Form

Linda,

The TS-1001 is certified to do static tank testing on the following:

- Monthly test can be performed on a tank up to 30,000 gallons
- Yearly test can be performed on a tank up to 15,000 gallons

So based on the total capacity of each tank, you are certified to do either tank test. If you have any further questions please let me know. Thanks.

Kevin DeVinney
 FMS Product Marketing Manager
 Franklin Fueling Systems
 207.571.1191

From: linda@foss.com [mailto:linda@foss.com]
Sent: Monday, May 15, 2006 11:41 AM
To: Sales - Incon
Subject: INCON General Contact Form

Data Submitted to INCON

The following information was submitted to INCON Website at 12:40:57 PM on 5/15/2006.

Full Name	Linda Brown
Position	Marine Buyer
Company	Foss Maritime Co.
Street Address	9030 NW St. Helens Road
City	Portland
State	Oregon
Zip Code	97231
Country	USA
Work Phone	503-978-6546
FAX	503-735-4976
Email	linda@foss.com
Request Description	We have an Incon TS-1001, serial # 55789. How do we determine if this is configured for 15,000 gallon tanks, or for 30,000 gallon tanks?

REMOTE_HOST: 206.129.252.2

HTTP_USER_AGENT: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; NET CLR 1.1.4322)

5/15/2006



Oregon

Theodore R. Kulungoski, Governor

Department of Environmental Quality

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

February 6, 2006

Jeffery G. Pike
3258 Cascade Hwy NE
Silverton OR 97381

RE: UST Supervisor License

You are licensed by the State of Oregon to supervise regulated underground storage tank services while employed by a licensed UST Service Provider. Your license(s) to supervise specific regulated activities are valid until the expiration date(s) below.

Licensed Services	Lic Nbr	Expiration
Cathodic Protection	26449	05/18/2007
Tank Tightness Testing	25892	03/30/2007

Your license(s) are issued under the provisions of OAR 340-160-005 through 340-160-150 and OAR 340-162-005 through 340-162-150.

The identification card below serves as proof of current licensing and must be available for inspection when performing UST Supervisor activities.

If you have questions concerning your license please contact Steve Paiko at (503) 229-6652 or toll free (in Oregon) (800) 452-4011.

Sincerely,

Wendy Wiles
UST Program Manager
UST Compliance Section

Jeffery G. Pike
3258 Cascade Hwy NE
Silverton OR 97381
LICENSED SERVICES LIC # EXPIRES
Cathodic Protection 26449 05/18/2007
Tank Tightness Testing 25892 03/30/2007

Supervisor Signature



UST SERVICE PROVIDER LICENSE

This License is Issued by the Oregon Department of Environmental Quality to:

Pike's Unlimited
3258 Cascade Hwy NE
Silverton OR 97381

You Are Licensed to Offer the Following Underground Storage Tank (UST) Services:

License Type =====	License Number =====	Issued =====	Expires =====
UST Services	25893	04/12/2006	04/27/2007

A Licensed Underground Storage Tank Supervisor Must be Present
at a Site to Perform These Services.



Authorized by:

Wendy Wiles

Wendy Wiles
UST Program Manager



A Copy of this License Shall be Available For Inspection at All Sites Involving UST Work.

Updated: 01-18-04

UST SERVICE PROVIDER LICENSE

This License is Issued by the Oregon Department of Environmental Quality to:

Corrosion Protection Services, LLC
20435 S. Leland Rd.
Oregon City, OR 97045

You Are Licensed to Offer the Following Underground Storage Tank (UST) Services:

License Type	License Number	Issued	Expires
Service Provider	10743	April 15, 2004	May 16, 2005

**A Licensed Underground Storage Tank Supervisor Must be Present
at a Site to Perform These Services.**



XXXXXX

RE ID: 680

XXXXXXXX

ADDR ID: 111576

Norman B. King

Authorized by:

Alan D. Kiphut
UST Program Manager



A Copy of this License Shall be Available For Inspection at All Sites Involving UST Work.

Updated: 01-18-04



Oregon

Theodore R. Kulonowski, Governor

Department of Environmental Quality

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5596

May 14, 2004

Roger A. Fernandez
Corrosion Protection Services
20435 S Leland Rd
Oregon City, OR 9704512708
AD: 174285

RE: UST Supervisor License

You are licensed in the State of Oregon to supervise the conduct of services for regulated underground storage tanks with valid permits while employed by a licensed UST Service Provider. Your licenses to supervise specific regulated activities are valid until the dates shown below and on your license card.

Licensed Services	License Number	Expiration Date
Cathodic Protection Test	15070	03/20/2006

Your licenses are issued under the provisions of OAR 340-160-005 through 340-160-150 and OAR 340-162-005 through 340-162-150 and OAR 340-163-005 through 340-163-150. It does not license you to act as an UST Service Provider in Oregon.

Your license card (below) must be available on demand for inspection whenever you are working as an UST Supervisor.

Sincerely,

Wendy Wiles
UST Program Manager
UST Compliance SectionRoger A. Fernandez
20435 S Leland Rd
Oregon City, OR 97045
LICENSED SERVICES LIC# EXPIRES
Cathodic Protection T 15070 03/20/2006
Supervisor Signature



Corrosion Protection Services, LLC

20435 S. Leland Rd. Oregon City Or, 97045
(503) 655-9488 FAX (503) 655-6150

OR CCB: 153293 | WA REG: Corrops985RZ

Emerging Small Business #3440 | OAME Member | NFIB and BBB Member

Call Art Van Alstine or Roger Fernandez

Fax Cover and Information Request

Date: 8/10/04 Fax: 503-735-4976 Phone: 503-998-6546 Pages: 4

To: Linda From: Foss Maritime Co. From: Art Van Alstine

Phone: 503-655-9488 Fax: 503-655-6150 E-Mail: arturo110229@aol.com

Here is the contract for this UST project. We will contact DEQ with all the notices necessary. Thanks very much for the order. We will have your site in EPA+DEQ compliance by the end of the month.

Thank You
Art Van Alstine



FAX Transmission

From: Linda Brown Number of pages Faxed: 2

Foss Maritime Co.
9030 NW St. Helens Road

Portland, Oregon 97231
Fax Number: 503/735-4976
Questions? 503/286-0631

To: Art

Company: Corrosion Protection Svcs.

Date: 8/11/04

Fax Number: () _____

Signed contract follows.
Please note P.O. # at bottom
of page.

Need an invoice for the down-
payment amount.

Thanks!
- Linda



FAX Transmission

From: Linda Brown Number of pages Faxed: 1

Foss Maritime Co.
9030 NW St. Helens Road

Portland, Oregon 97231
Fax Number: 503/735-4976
Questions? 503/286-0631

To: Art

Company: C.P.S.

Date: 9/13/04

Fax Number: () _____

Per our discussion — 2 concerns:

① Concrete patches are not all
smooth & can be a trip hazard

② Trench for line: tar is approx.
1/2" below surface on majority

Please fix.
Thanks! — Linda



Corrosion Protection Services, LLC

20435 S. Leland Rd. Oregon City Or, 97045
(503) 655-9488 FAX (503) 655-6150

OR CCB: 153293 | WA REG: Corrops985RZ

Emerging Small Business #3440 OAME Member NFB and BBB Member

Call Art Van Alstine or Roger Fernandez

Fax Cover and Information Request

Date: 6/28/04 Fax: 503-735-4976 Phone: Pages: 8

To: Linda Brown Firm: Foss Maritime Co. From: Art Van Alstine

Phone: 503-655-9488 Fax: 503-655-6150 E-Mail: arturo110229@aol.com

Here is the information you requested.
Call me at 503-655-9488 if you have any
questions.

Thanks

Art Van Alstine

Date: 6/25/2004

From: Art Van Alstine

Bid Proposal:

1067 DEO #7374



Corrosion Protection Services, LLC

20435 S. LELAND RD, OREGON CITY, OR 97045

(503) 655-9488 FAX (503) 655-6150

Call Art Van Alstine or Roger Fernandez

Emerging Small Business # 3440 | OAME Member | NFIB and BBB Member

Account: Foss Maritime Co.

Address: 9030 N.W. St. Helens Rd.

Cty/St/Zip: Portland, OR 97231

Contact: Linda Brown

Cell:

Phone: 503-978-6546

Fax: 503-735-4976

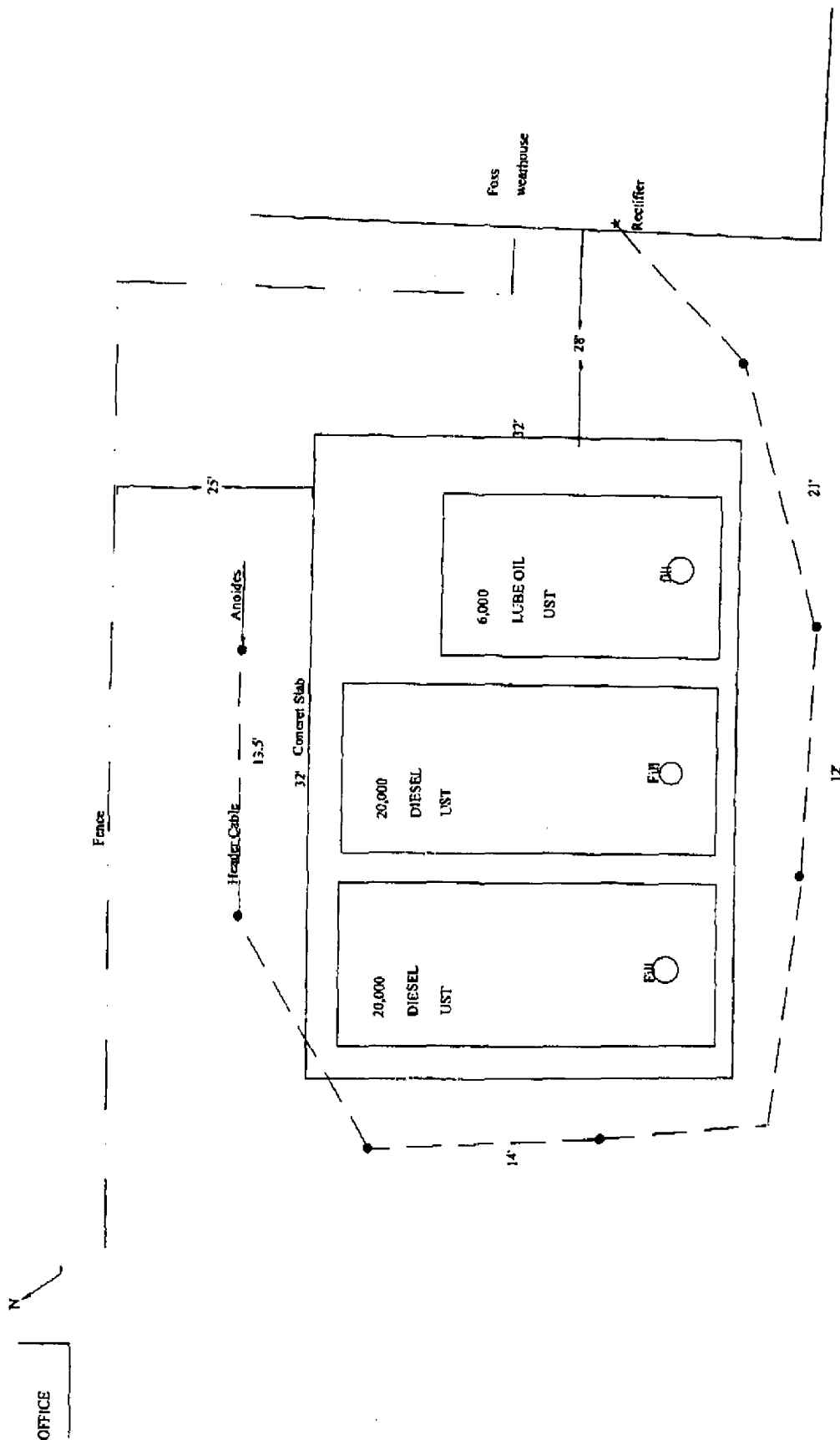
Project: UST- Cut Header cable

Address: Same

Cty/St/Zip:

Contact:

[illegible]



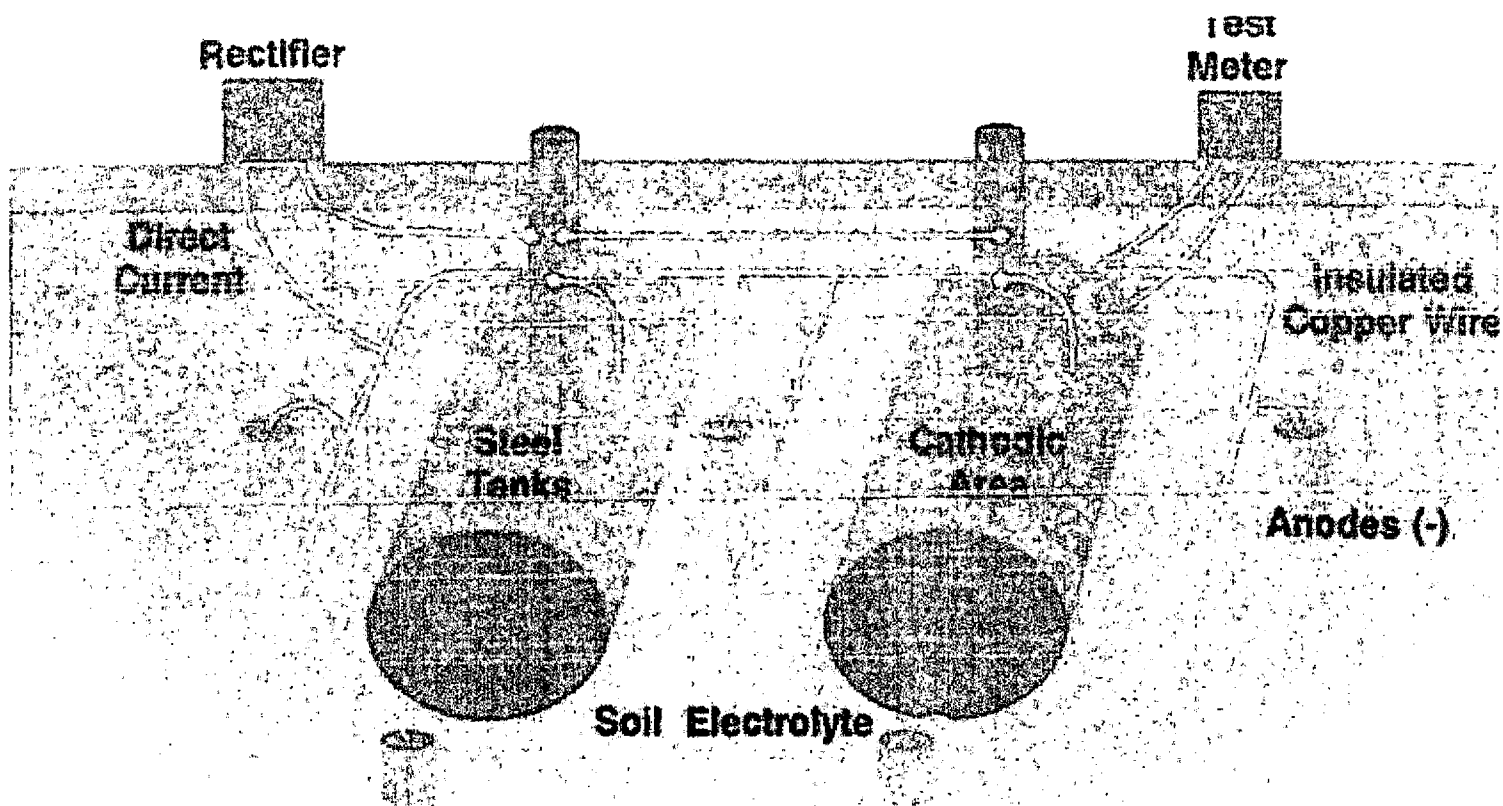
FOSS MARITIME
CATHODIC PROTECTION ASBUILTS

CATHODIC PROTECTION

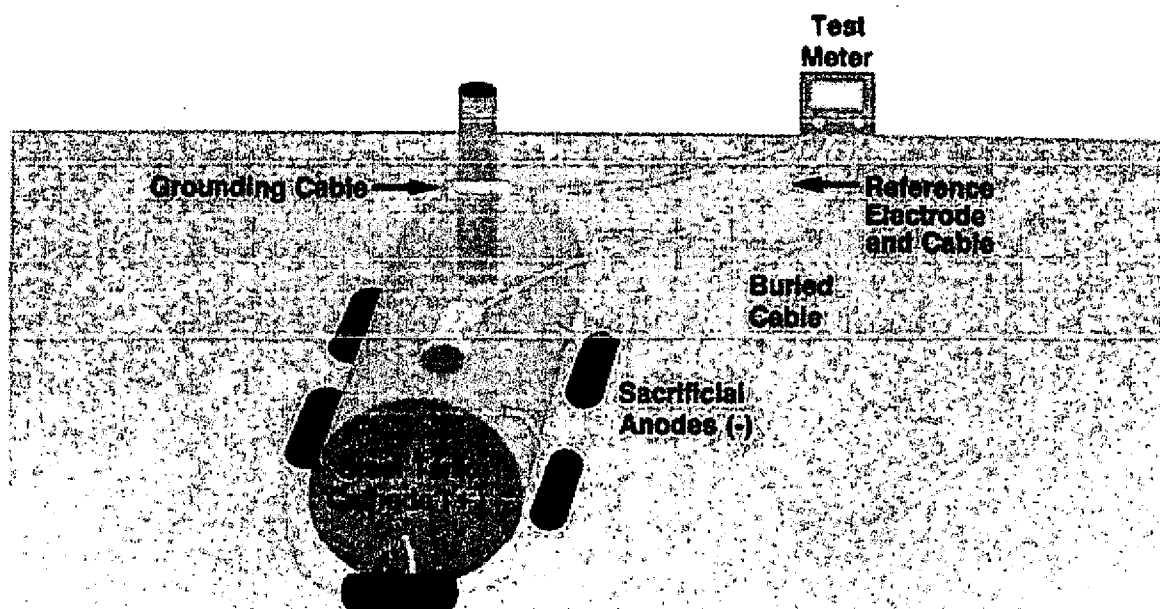
THIS SECTION SHOULD CONTAIN ALL OF THE INFORMATION PERTAINING TO THE INSTALLATION AND MAINTENANCE OF THE CATHODIC SYSTEM INCLUDING, BUT NOT LIMITED TO:

- **INFORMATION AND WARRANTIES FOR STI-P3 TANKS**
- **PRE-TESTS AND ENGINEERING DRAWINGS FOR THE INSTALLATION OF EITHER A GALVANIC OR IMPRESSED CURRENT SYSTEM**
- **NECESSARY PERMITS AND CHECK-LISTS**
- **POST INSTALLATION TESTING AND RECORDS**
- **INFORMATION ON LININGS (IF DONE)**
- **TEST RESULTS AS REQUIRED BY RULE**
- **TEST STATION INFORMATION**
- **ANY OTHER PERTINENT DATA**

*Tested every 3 years by Licensed testing people
current monitoring every 60 days
Recommended testing yearly*



Cathodic Protection Employing Impressed Current



Cathodic Protection
Typical Installation of Galvanic/Sacrificial Anode System



Fax

To: Linda**From:** Jeff Pike**Fax:****Pages:** 24**Phone:****Date:** 1/12/2007**Re:****CC:** Greg Toran Bob Mascott☐ **Urgent**☐ **For Review**☐ **Please Comment**☐ **Please Reply**☐ **Please Recycle**

Facility ID 7374**Foss Maritime. Sump sensor.**

Here is the out come of the test performed on Jan 8th 2007. I can mail you the photos if thay do not come out clear on the fax.

Thanks

Jeff

January 12, 2007

To: Foss Maritime

RE: Functional test Incon sensor

Site: 9030 NW St Helens Road Portland, OR 97231.

Facility ID: 7374

On January 8th 2007 Pike's Unlimited performed a field function test on an Incon sump float switch (INTSP-ULS). The test was Performed to show that the sump dose work with 30 weight motor oil. Mascott Equipment was on site to verify the test results

The Incon panel was photographed (Photograph One) prior to the test all lights indicated no alarms and the system was working normally.

Approximately three inches of Oil was Placed in a bucket and used for the test. The oil was obtained from Fosses dispenser to insure compatibility for the test.

The bucket was placed in the sump and the Incon sensor was dipped in to the oil (Photograph Two), Simulating a leak.

The Incon alarm panel was then checked. The system was in alarm indicating that a leak had been detected (Photograph Three).

When the program was checked the readout showed that the alarm was coming form the Incon sensor. The sensor was removed from the bucket and the alarm acknowledged. The audible and visual alarms stopped.

It is understood that the Incon senor has not been certified by the manufacture for use with 30 weight oil. This is in part due to the financial cost. That would be incurred for the certification and the low return the company would receive. The sensor is rated for Diesel and other liquids. Which share many of the same Hydrocarbons as 30 weight Oil.

The results of the test show that the sensor doses react to 30 weight oil and dose provide an indication that a leak is occurring.

Although, this sensor dose not meet OAR standards. It is the best Leak detection method that we have found at this time.

Respectfully

Jeff Pike



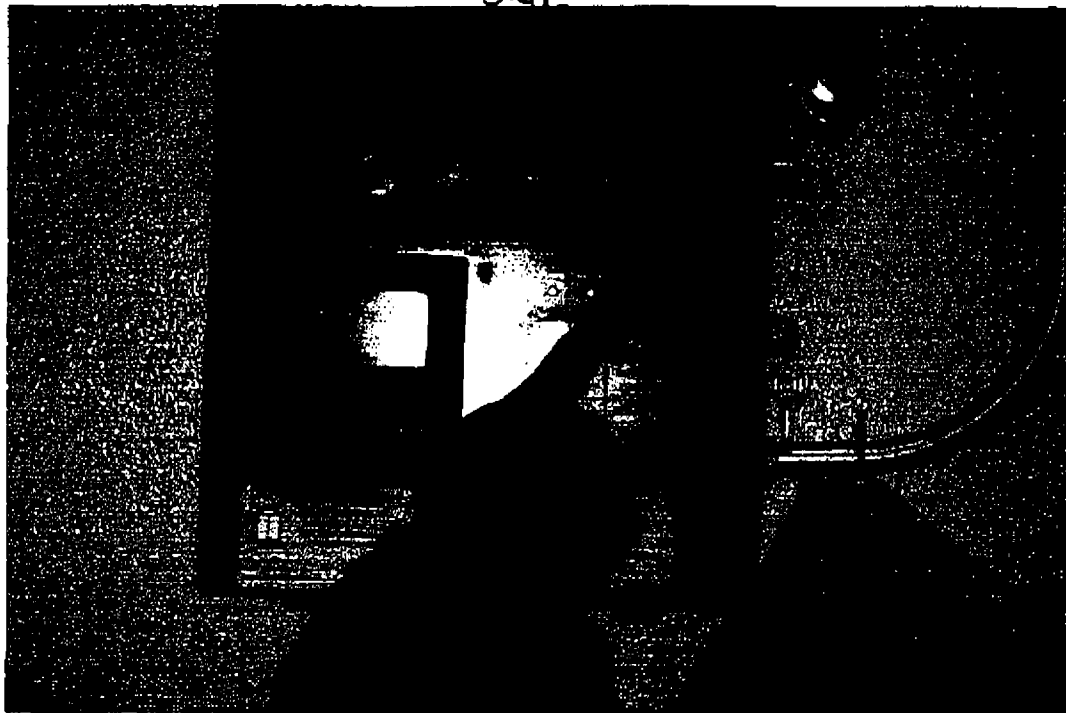
CC;

Linda Brown Foss Maritime

Greg Toran DEQ

Bob/Adam Mascott Equipment

ONE

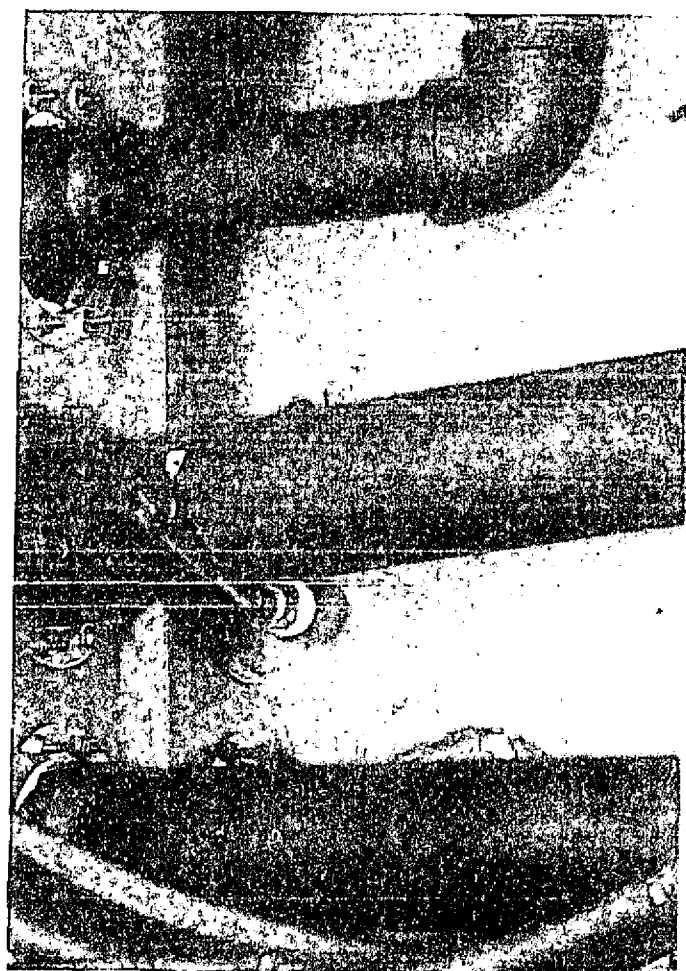
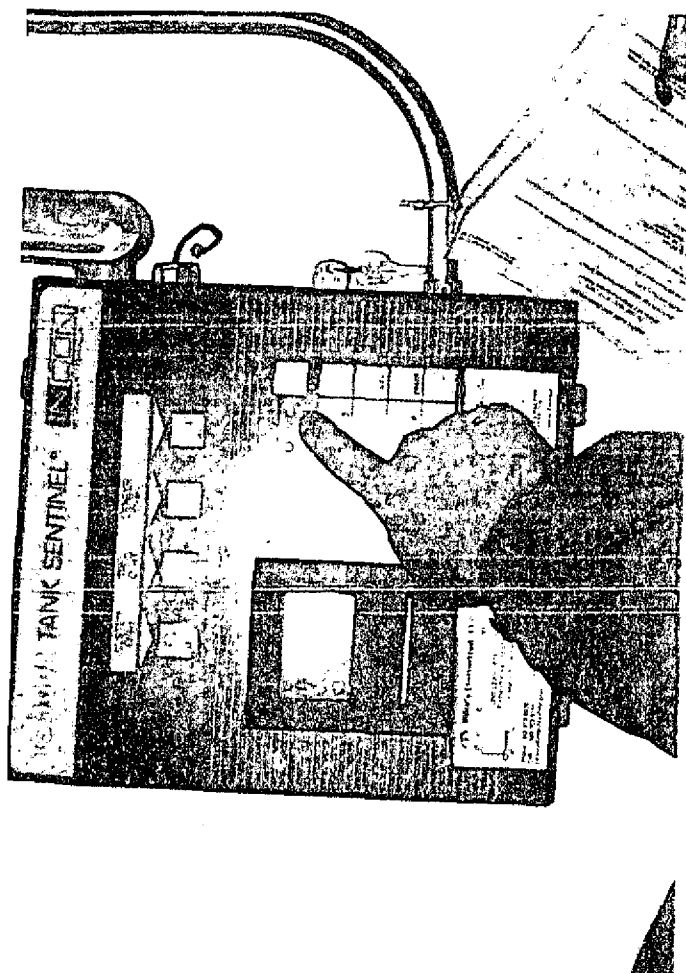
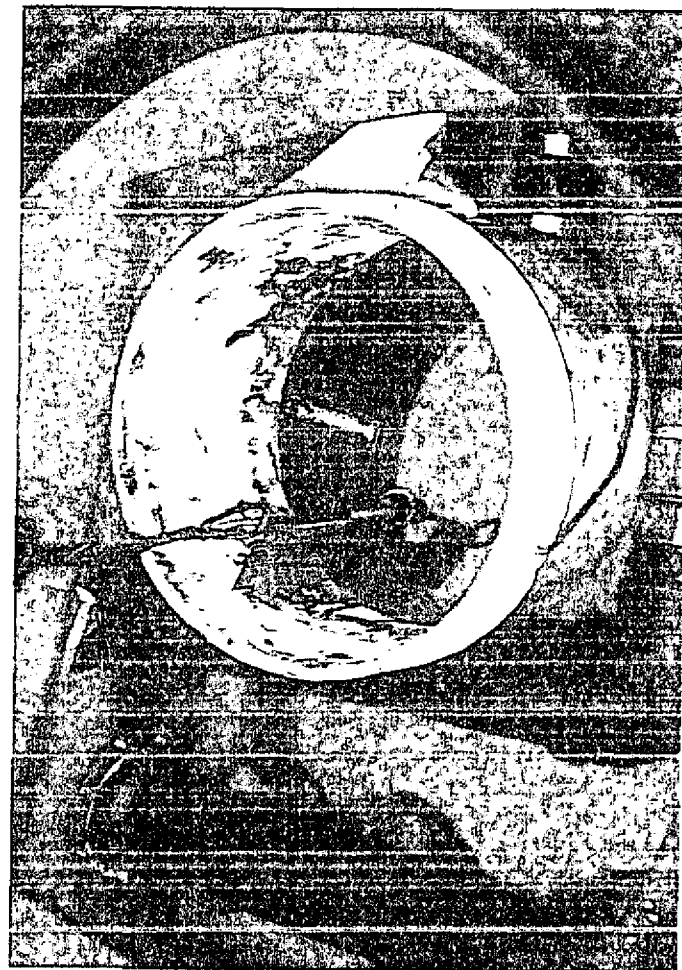
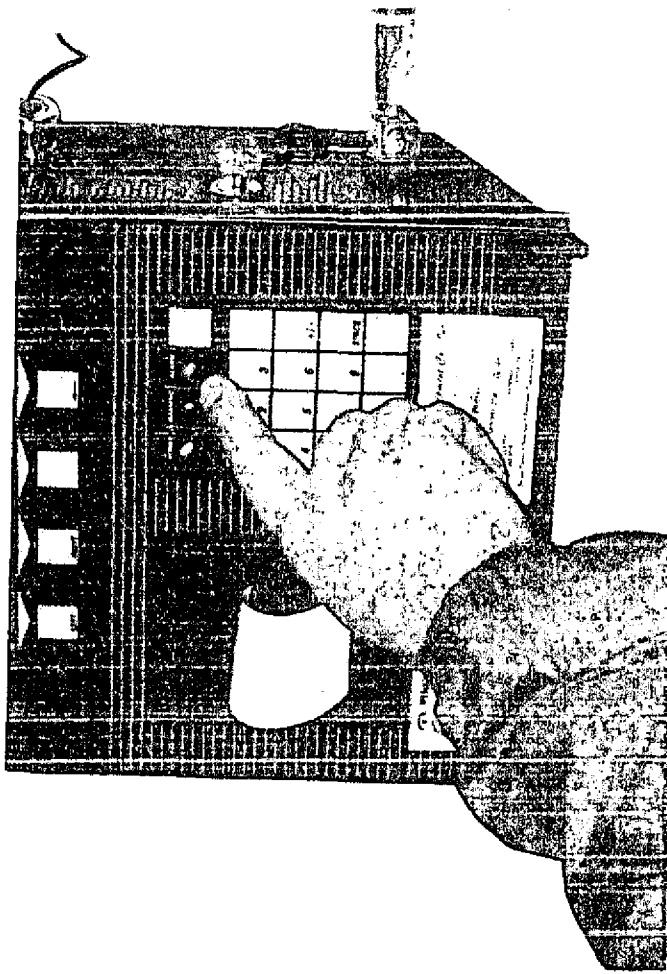


TWO



Three





INCON Intelligent Controls, Inc.

TS 750, 1000, 1001, 2001
(Incon LL2 Magnetostrictive Probe)

AUTOMATIC TANK GAUGING METHOD

Certification: Leak rate of 0.2 gph with $P_D = 95.7\%$ and $P_{FA} = 4.3\%$.

Leak Threshold: 0.1 gph. A tank system should not be declared tight if the test result indicates a loss or gain that equals or exceeds this threshold.

Applicability: Gasoline, diesel, aviation fuel, fuel oil #4.
Other liquids with known coefficients of expansion and density may be tested after consultation with the manufacturer.

Tank Capacity: Maximum of 30,000 gallons.
Tanks less than 95% full may be tested.
Minimum product level required based on tank diameter as follows:
48" dia/min 12"; 64" dia/min 14"; 72" dia/min 15"; 96" dia/min 17.5";
126" dia/min 21.5". For other diameters, see evaluation report.

Waiting Time: Minimum of 4 hours 9 minute between delivery and testing.
Minimum of 2 hours between dispensing and testing.
There must be no delivery during waiting time.

Test Period The length of the test is determined automatically based on quality of test data.
Average data collection time during the evaluation was 6 hours, 51 minutes.
Test data is acquired and recorded by system's computer.
Leak rate is calculated from data determined to be valid by statistical analysis.
There must be no dispensing or delivery during the test.

Temperature: Probe contains 5 thermistors to monitor product temperature. At least one thermistor must be submerged in product during testing.

Water Sensor: Must be used to detect water ingress.
Minimum detectable water level in the tank is 0.208 inches.
Minimum detectable water level change is 0.011 inch.

Calibration: Thermistors and probe must be checked and, if necessary, calibrated in accordance with manufacturer's instructions.

Comments: This equipment was not evaluated using manifolded tanks.
Tests only the portion of the tank containing product.
As product level is lowered, the leak rate in a leaking tank decreases (due to lower head pressure). Consistent testing at low levels could allow a leak to remain undetected. EPA leak detection regulations require testing of the portion of the tank system which routinely contains product.
TS1000 and 1001 can support up to 4 tanks. TS2001 can support up to 8 tanks.
TS 750 can support up to 4 tanks, but does not provide fuel logistics, remote monitoring and other business management options available with TS 1000, 1001 and 2001.

INCON Intelligent Controls, Inc.	Evaluator: Ken Wilcox Associates
74 Industrial Park Rd.	Tel: (816) 443-2494
Saco, ME 04072	Date of Evaluation: 05/14/98, 08/21/02
Tel: (800) 872-3455	

☒ PORTLAND
435 N.E. HANCOCK
PORTLAND, OR 97212
503-282-2587

☐ TRICITIES
200 S. 20TH AVE.
PASCO, WA 99301
509-543-2018

☐ SEATTLE
6530 5TH PLACE SOUTH
SEATTLE, WA 98108
206-763-7867

117741

ACCOUNT NUMBER
830

JOB SITE	
ORDER DATE 10/27/06	JOB PHONE 503 286-0631
WORK ORDERED BY Linda Brown	

SOLD TO Egg Machine	
ADDRESS 9030 NW 5th Avenue	
CITY Portland	STATE OR
ZIP 97231	
CUSTOMER P.O. NUMBER	TECHNICIAN Alan

JOB NAME Same	
ADDRESS	
CITY	STATE
MFG AUTHORIZATION (if necessary)	

MODEL TS-1001	SERIAL NUMBER 55789	MODEL	SERIAL NUMBER
------------------	------------------------	-------	---------------

PROBLEM REPORTED:
Connect Incon sensor
to Incon console

MATERIAL USED

QTY.	WH	PART NUMBER	DESCRIPTION	PRICE	AMOUNT
1	1	TN400	Seal pack		

TIME ARRIVED 1240 AM (PM)(circle one)	TIME DEPARTED 130 AM (PM)(circle one)	Customer Initials
--	--	-------------------

WORK DESCRIPTION:
Installed VLS sensor & tested

WARRANTY <input type="checkbox"/>	COMPLETE <input checked="" type="checkbox"/>	PENDING <input type="checkbox"/>
-----------------------------------	--	----------------------------------

SERVICEMAN W. B. [Signature]	CHARGES	QTY.	RATE	AMOUNT
DATE COMPLETED 10/27/06	STANDARD LABOR	1	75.00	
TERMS: NET 10TH PROX	OVERTIME LABOR			
CUSTOMER NAME	TRAVEL TIME	20	7.50	
CUSTOMER AUTHORIZED SIGNATURE [Signature]	MILEAGE			
	TOTAL MATERIAL			
	ENVIRONMENTAL FEE		\$14.50	
	SALES TAX			
TOTAL AMOUNT DUE				



PORTLAND
435 NE Hancock
Portland, OR 97212
(503) 282-2587
FAX (503) 288-9664

SEATTLE
6530 5TH Place South
Seattle, WA 98108
(206) 763-7867
FAX (206) 763-9006

TRI-CITIES
200 S. 20th Ave
Pasco, WA 99301
(509) 543-2018
FAX (509) 543-2051

INVOICE NO.	1347
PAGE	1
DATE	10/27/06

SOLD TO 830
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

SHIP TO SAME
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

PLEASE PAY ON INVOICE - REMIT TO 435 NE HANCOCK - PORTLAND, OR 97212 - NO STATEMENT ISSUED UNLESS REQUESTED

REFERENCE NUMBER	SHIP DATE	SALES PERSON	TERMS	TAX CODE	DOC. NO.	W/H	FREIGHT	SHIP VIA	
JEFF PIKE	10/27/06	A (RBB)	NET 10TH	ORMULPOR	117152	01	BILL	W/C	
ITEM	DESCRIPTION	ORDERED	SHIPPED	BACK ORDER	U/M	PRICE	COST	PER	EXTENSION
ENFEB3157	BOOT, .5"/.75"/1" COMBO FLEX.	1	1	0	EA	27.00	27.00	EA	27.00
<div>COPY</div> <div>REC'D OCT 30 2006</div> <div>COPY</div> <div>500040 W</div> <div>UR</div>									
1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE 2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL 3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE HERON SHALL APPLY TO THIS SALE 4. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.		MERCHANDISE	MISCELLANEOUS	DISCOUNT		TAX	FREIGHT	TOTAL DUE	
XXX-XXX-XXXX FX		27.00	.00	.00		.00	.00	27.00	

PAST DUE ACCOUNTS SUBJECT TO 1 1/2% INTEREST CHARGE PER MONTH, 18% ANNUAL RATE

25% RESTOCK FEE ON ALL RETURNED MERCHANDISE

ORIGINAL



PORTLAND
435 NE Hancock
Portland, OR 97212
(503) 282-2587
FAX (503) 288-9664

SEATTLE
6530 5TH Place South
Seattle, WA 98108
(206) 763-7867
FAX (206) 763-9006

TRI-CITIES
200 S. 20th Ave
Pasco, WA 99301
(509) 543-2018
FAX (509) 543-2051

COPY

INVOICE NO.	134
PAGE	1
DATE	10/24/06

SOLD TO
830
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

SHIP TO
1
FOSS MARITIME
9030 NW ST HELENS ROAD
PORTLAND, OR 97231

PLEASE PAY ON INVOICE - REMIT TO 435 NE HANCOCK - PORTLAND, OR 97212 - NO STATEMENT ISSUED UNLESS REQUESTED

REFERENCE NUMBER	SHIP DATE	SALES PERSON	TERMS		TAX CODE	DOC. NO	W/H	FREIGHT	SHIP VIA	
LINDA	10/20/06	A (RBB)	NET 10TH		ORMULPOR	116406	01	BILL	SERVICE	
ITEM	DESCRIPTION		ORDERED	SHIPPED	BACK ORDER	U/M	PRICE	COST	PER	EXTENSION
	LINDA'S # 503-978-6546 DIESEL NOT PASSING LEAK TESTS ON INCON TS1001									
	DATE INCORRECT - WOULD LIKE A CALL TODAY, 10/10/06, TO CHANGE DATE. CALLED 3 TO 4 WEEKS AGO AND NOBODY CALLED HER BACK									
LABOR	LABOR, (On-Site/Shop Service)		.5	.5	.0	EA	76.00	76.00	EA	38.00
TRIP CHARGE	LABOR, (Travel & Mileage)		1	1	0	EA	95.00	95.00	EA	95.00
	CHANGED PROGRAMMING. WAITING FOR CUSTOMER'S RESPONSE. SJC. 10/20/06.									
COPY										
1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE 2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL 3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE HERON SHALL APPLY TO THIS SALE 4. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.			MERCHANDISE	MISCELLANEOUS	DISCOUNT		TAX	FREIGHT	TOTAL DUE	
XXX-XXX-XXXX FX			133.00	.00	.00		.00	.00	133.00	

COPY

500040W
U86

PAST DUE ACCOUNTS SUBJECT TO 1 1/2% INTEREST CHARGE PER MONTH, 18% ANNUAL RATE

25% RESTOCK FEE ON ALL RETURNED MERCHANDISE

ORIGINAL



PORTLAND
435 NE Hancock
Portland, OR 97212
(503) 282-2587
FAX (503) 288-9664

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6530 5TH Place South
Seattle, WA 98108
(206) 763-7867
FAX (206) 763-9006

TRI-CITIES
200 S. 20th Ave
Pasco, WA 99301
(509) 543-2018
FAX (509) 543-2051

INVOICE NO.	134
PAGE	1
DATE	10/25/06

COPY

SOLD TO 830
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

SHIP TO SAME
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

PLEASE PAY ON INVOICE - REMIT TO 435 NE HANCOCK - PORTLAND, OR 97212 - NO STATEMENT ISSUED UNLESS REQUESTED

REFERENCE NUMBER	SHIP DATE	SALES PERSON	TERMS		TAX CODE		DOC. NO.	W/H	FREIGHT	SHIP VIA	
523683	10/25/06	A (RBB)	NET 10TH		ORMULPOR		114516	01	BILL	W/C BY JEFF	
ITEM		DESCRIPTION	ORDERED	SHIPPED	BACK ORDER	U/M	PRICE		COST	PER	EXTENSION
INTSP-ULS		SENSOR, SUMP FLOAT SWITCH	1	1	0	EA	192.00		192.00	EA	192.00
IN87761		CABLE, BELDEN 22 GA./SHIELDED	130	130	0	FT	.58		.58	FT	75.40
		LINE 2 ADDED BY JEFF PIKE									
		10/25/06									
COPY											
1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE 2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL 3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE HERON SHALL APPLY TO THIS SALE 4. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.			MERCHANDISE	MISCELLANEOUS	DISCOUNT		TAX		FREIGHT	TOTAL DUE	
			267.40	.00	.00		.00		.00	267.40	
XXX XXX XXXX CV											

1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE
2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL
3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE
4. HERON SHALL APPLY TO THIS SALE
5. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.

XXX-XXX-XXXX FX

PAST DUE ACCOUNTS SUBJECT TO 1 1/2% INTEREST CHARGE PER MONTH, 18% ANNUAL RATE

25% RESTOCK FEE ON ALL RETURNED MERCHANDISE

ORIGINAL

Handwritten signature/initials

COPY

Confidential Business Information

00014211



PORTLAND
435 NE Hancock
Portland, OR 97212
(503) 282-2587
FAX (503) 288-9664

SEATTLE
6530 5TH Place South
Seattle, WA 98108
(206) 763-7867
FAX (206) 763-9006

TRI-CITIES
200 S. 20th Ave
Pasco, WA 99301
(509) 543-2018
FAX (509) 543-2051

INVOICE NO.	134
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DATE	10/31/06

SOLD TO 830
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

SHIP TO SAME
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

PLEASE PAY ON INVOICE - REMIT TO 435 NE HANCOCK - PORTLAND, OR 97212 - NO STATEMENT ISSUED UNLESS REQUESTED

REFERENCE NUMBER	SHIP DATE	SALES PERSON	TERMS		TAX CODE	DOC. NO.	W/H	FREIGHT	SHIP VIA	
LINDA	10/27/06	A (RBB)	NET 10TH		ORMULPOR	117141	01	BILL	SERVICE	
ITEM	DESCRIPTION		ORDERED	SHIPPED	BACK ORDER	U/M	PRICE	COST	PER	EXTENSION
	CONNECT SENSORS (SET UP BY PIKE) TO TANK MONITOR SITE 503-286-0631									
LABOR	LABOR, (On-Site/Shop Service)		1.0	1.0	.0	EA	76.00	76.00	EA	76.00
TRIP CHARGE	LABOR, (Travel & Mileage)		1	1	0	EA	95.00	95.00	EA	95.00
SHOP	Miscellaneous Materials Used		1	1	0	EA	14.50	14.50	EA	14.50
	INSTALLED ULS SENSOR & TESTED 10/27/06. ABD.									
ENT'D NOV - 2 2006 COPY										
1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE 2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL 3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE HERON SHALL APPLY TO THIS SALE 4. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS. XXX XXX XXXX EX			MERCHANDISE	MISCELLANEOUS	DISCOUNT		TAX	FREIGHT	TOTAL DUE	
			185.50	.00	.00		.00	.00	185.50	

XXX-XXX-XXXX FX

PAST DUE ACCOUNTS SUBJECT TO 1 1/2% INTEREST CHARGE PER MONTH, 18% ANNUAL RATE

25% RESTOCK FEE ON ALL RETURNED MERCHANDISE

ORIGINAL

Confidential Business Information

00014212



ELECTRICAL CONTRACTORS

Mailing Address
P.O. Box 15009
Portland, OR 97293-5009

Phone: 503-233-8801
Fax: 503-872-8290
CCB#: 166



112

NAME	Foss Maritime	JOB#:	22,3122
ADDRESS	9030 NW Saint Helens Rd P41A 97231	DATE	10-25-06
JOB NAME		PHONE	503-286-0631
JOB ADDRESS		PHONE	

ELECTRICIAN	DATE	HOURS	INITIAL	ELECTRICIAN	DATE	HOURS	INITIAL
Chris	10-26	3.5	[Signature]				

DESCRIPTION
Furnish install low voltage as directed Linda Brown INSTALLED CUSTOMER PROVIDED L/V CABLE FROM SUMP (OUTSIDE) TO OFFICE INSIDE - SERVICE LOOP BOTH ENDS FOR Jeff Pike - 1-503-302-9144 FUTURE Hook up per Jeff. (Petroleum)

WE PROPOSE to furnish labor and material - complete in accordance with above specifications, and subject to conditions found on this agreement, for the sum of:

\$

Labor	Start Date 10/26/06 8 AM	Finish Date 10-26	AUTHORIZATION I agree to pay for all work performed under this authorization upon receipt of invoice. Invoiced amounts not paid within 30 days are delinquent and shall bear interest at the rate of 1.5% per month until paid. I also agree to pay Tice's reasonable costs of collecting any delinquent amounts including, but not limited to, attorney's fees at trial or on appeal regardless of whether suit or action is filed.
Permit			
Material	Electrician Chris P.		
Equip.	Warehouse Number		
Total			
Tax	Signature [Signature]	Approval Date 10/26/06	
TOTAL	Signature	Approval Date	

Hours	Labor	Taxes	Permit	Material	Mileage	Other	Total Cost
-------	-------	-------	--------	----------	---------	-------	------------

TICE ELECTRIC COMPANY

5405 N. Lagoon Ave ~ Portland ~ OR ~ 97217-7637 ~ 503/233-8801

Invoice Date 10-31-2006
Invoice No. 223122
Job No. 22.3122
Project Manager Arno

INVOICE

To:

Foss Maritime
9030 NW Saint Helens Road
Portland, OR 97231-1127

112

Job:

Foss Maritime
9030 NW Saint Helens Road
Portland, OR 97231

Description**Total**

Service call - 10/26/2006

Installed Customer provided low voltage cable from sump (outside)
to inside office - service loop both ends for future hook up.

Labor

278.25

Material

24.04

COPY

REC'D NOV - 6 2006

500040 W
UR

Amount Billed

\$302.29

DATE DUE 11-30-2006

Total Amount Due

\$302.29

Thank you for your business.



CERTIFICATE OF APPROVAL

This is to certify that the Quality Management System of:

***Franklin Fueling Systems/ INCON
Saco, Maine, USA***

*has been approved by Lloyd's Register Quality Assurance
to the following Quality Management System Standards:*

ISO 9001: 2000

The Quality Management System is applicable to:

***Design, Development and Manufacture of Measurement Devices,
Instruments, and Related Software for Environmental Monitoring,
Positions Monitoring, Inventory Control, Liquid Level/Flow
Measurement for Oil/Petroleum, Power Reliability, Power Utility
and Other General Industrial Market Use.***

Approval
Certificate No: UQA 4000068

Original Approval: May 16, 2005

Current Certificate: May 16, 2005

Certificate Expiry: May 16, 2008


Issued by: LRQA, Inc. Houston



*This document is subject to the provision on the reverse
This approval is carried out in accordance with the LRQA assessment and certification procedures and monitored by LRQA.
Issue Review 13*

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

03/01/2004 2:59

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.02
TEST STARTED 23:59
TEST STARTED 02/29/2004
LAST DELIVERY 7:47
LAST DELIVERY 02/28/2004
GROSS CAPACITY 29.32
BEGIN GROSS 1833.9 GAL
BEGIN NET 1839.7 GAL
BEGIN LEVEL 31.745 IN
BEGIN TEMP 51.955 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.018 IN
END TIME 2:58
END DATE 03/01/2004
END GROSS 1832.9 GAL
END NET 1839.6 GAL
END LEVEL 31.744 IN
END TEMP 51.967 F
END WATER 0.0 GAL
END WATER 0.017 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	51.958	1839.67
1:58	51.959	1839.67
2:58	51.967	1839.64

SLOPE -0.006 GAL/HR
SLOPE LOW -0.007 GAL/HR
SLOPE HIGH -0.006 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

03/01/2004 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.02
TEST STARTED 23:59
TEST STARTED 02/29/2004
LAST DELIVERY 5:09
LAST DELIVERY 02/28/2004
GROSS CAPACITY 22.22
BEGIN GROSS 4444.1 GAL
BEGIN NET 4460.5 GAL
BEGIN LEVEL 32.551 IN
BEGIN TEMP 51.887 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 03/01/2004
END GROSS 4444.5 GAL
END NET 4460.8 GAL
END LEVEL 32.553 IN
END TEMP 51.943 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	51.893	10381.40
1:58	51.903	10381.32
2:58	51.911	10381.41
3:58	51.917	10381.30
4:58	51.922	10381.40
5:58	51.930	10381.29
6:58	51.935	10381.60
7:58	51.943	10381.80

SLOPE 0.035 GAL/HR
SLOPE LOW 0.034 GAL/HR
SLOPE HIGH 0.037 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

03/01/2004 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.02
TEST STARTED 23:59
TEST STARTED 02/29/2004
LAST DELIVERY 5:09
LAST DELIVERY 02/28/2004
GROSS CAPACITY 29.42
BEGIN GROSS 5898.1 GAL
BEGIN NET 5920.8 GAL
BEGIN LEVEL 39.928 IN
BEGIN TEMP 51.532 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 03/01/2004
END GROSS 5898.5 GAL
END NET 5921.0 GAL
END LEVEL 39.929 IN
END TEMP 51.581 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	51.545	10381.40
1:58	51.550	10381.32
2:58	51.550	10381.41
3:58	51.558	10381.30
4:58	51.563	10381.40
5:58	51.568	10381.29
6:58	51.572	10381.60
7:58	51.581	10381.80

SLOPE 0.035 GAL/HR
SLOPE LOW 0.034 GAL/HR
SLOPE HIGH 0.037 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

03/01/2004 10:17
TANK TEST REPORT
TANK 2 20032.7 GAL
DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.02
TEST STARTED 23:59
TEST STARTED 02/29/2004
LAST DELIVERY 5:09
LAST DELIVERY 02/28/2004
GROSS CAPACITY 29.42
BEGIN GROSS 5898.1 GAL
BEGIN NET 5920.8 GAL
BEGIN LEVEL 39.928 IN
BEGIN TEMP 51.532 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 03/01/2004
END GROSS 5898.5 GAL
END NET 5921.0 GAL
END LEVEL 39.929 IN

POSS MARITIME
9934 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

02/03/2004 10:17

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPM
LEAK THRESHOLD 0.100 GPM
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 02/29/2004
LAST DELIVERY 5:09
LAST DELIVERY 02/28/2004
GROSS CAPACITY 29.47
REGIN GROSS 5999.1 GAL
REGIN NET 5920.8 GAL
REGIN LEVEL 39.929 IN
REGIN TEMP 51.532 F
REGIN WATER 0.0 GAL
REGIN WATER 0.000 IN
END TIME 7:59
END DATE 03/01/2004
END GROSS 5998.5 GAL
END NET 5921.8 GAL
END LEVEL 39.929 IN
END TEMP 51.581 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DFG	GAL
0:59	51.545	10381.40
1:59	51.550	10381.32
2:59	51.550	10381.41
3:59	51.558	10381.30
4:59	51.567	10381.40
5:59	51.568	10381.29
6:59	51.572	10381.60
7:59	51.581	10381.80

SLOPE 0.035 GAL/HR
SLOPE LOW 0.034 GAL/HR
SLOPE HIGH 0.037 GAL/HR
TEST RESULT -----PASSED
SLOPE EQUALS CALCULATED
TANK 2

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPM
LEAK THRESHOLD 0.100 GPM
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 02/29/2004
LAST DELIVERY 5:09
LAST DELIVERY 02/28/2004
GROSS CAPACITY 22.2%
REGIN GROSS 4444.4 GAL
REGIN NET 4444.4 GAL

BEGIN FUEL 4460.8 GAL
 BEGIN TEMP 51.887 F
 BEGIN WATER 0.0 GAL
 BEGIN WATER 0.000 IN
 END TIME 7:58
 END DATE 03/01/2004
 END GROSS 4444.5 GAL
 END NET 4460.8 GAL
 END FUEL 32.553 IN
 END TEMP 51.943 F
 END WATER 0.0 GAL
 END WATER 0.000 IN

COULD DATA

TIME DEG F GAL
 0:58 51.903 1838.32
 1:58 51.911 1838.32
 2:58 51.917 1838.32
 3:58 51.907 1838.40
 4:58 51.911 1838.129
 5:58 51.908 1838.160
 6:58 51.943 1838.188

SLOPE -0.006 GAL/HR
 SLOPE LOW -0.004 GAL/HR
 SLOPE HIGH -0.007 GAL/HR
 TEST RESULT PASSED
 SLOPE EQUALS CALCULATED
 LEAK RATE

END TIME 6260.8 GAL

BEGIN FUEL 1839.7 GAL
 BEGIN TEMP 51.955 F
 BEGIN WATER 0.0 GAL
 BEGIN WATER 0.000 IN
 END TIME 2:58
 END DATE 03/01/2004
 END GROSS 1832.9 GAL
 END NET 1839.6 GAL
 END FUEL 31.745 IN
 END TEMP 51.967 F
 END WATER 0.0 GAL
 END WATER 0.017 IN

COULD DATA

TIME DEG F GAL
 0:58 51.958 1839.67
 1:58 51.959 1839.67
 2:58 51.967 1839.64

SLOPE -0.006 GAL/HR
 SLOPE LOW -0.007 GAL/HR
 SLOPE HIGH -0.006 GAL/HR
 TEST RESULT PASSED
 SLOPE EQUALS CALCULATED
 LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

04/01/2004 7:50

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 03/31/2004
LAST DELIVERY 10:22
LAST DELIVERY 03/30/2004
GROSS CAPACITY 81.1%
BEGIN GROSS 16244.0 GAL
BEGIN NET 16278.7 GAL
BEGIN LEVEL 89.941 IN
BEGIN TEMP 55.290 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:50
04/01/2004
END GROSS 16244.5 GAL
END NET 16279.1 GAL
END LEVEL 89.944 IN
END TEMP 55.309 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	55.294	29765.43
1:58	55.296	29765.46
2:58	55.298	29765.47
3:58	55.298	29765.33
4:58	55.301	29765.27
5:58	55.302	29765.30
6:58	55.305	29766.16
7:58	55.309	29766.10

SLOPE 0.075 GAL/HR
SLOPE LOW 0.072 GAL/HR
SLOPE HIGH 0.078 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

04/01/2004 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 03/31/2004
LAST DELIVERY

END NET 16279.1 GAL
END LEVEL 89.944 IN
END TEMP 55.309 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	55.294	29765.43
1:58	55.296	29765.46
2:58	55.298	29765.47
3:58	55.298	29765.33
4:58	55.301	29765.27
5:58	55.302	29765.30
6:58	55.305	29766.16
7:58	55.309	29766.10

SLOPE 0.075 GAL/HR
SLOPE LOW 0.072 GAL/HR
SLOPE HIGH 0.078 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83618
PORTLAND OREGON 97231
1-503-286-8631

04/01/2004 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 03/31/2004
LAST DELIVERY 10:22
LAST DELIVERY 03/30/2004
GROSS CAPACITY 67.2%
BEGIN GROSS 13458.0 GAL
BEGIN NET 13486.7 GAL
BEGIN LEVEL 75.762 IN
BEGIN TEMP 55.295 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 04/01/2004
END GROSS 13458.4 GAL
END NET 13487.0 GAL
END LEVEL 75.764 IN
END TEMP 55.332 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	55.301	29765.43
1:58	55.305	29765.46
2:58	55.309	29765.47
3:58	55.314	29765.33
4:58	55.319	29765.27
5:58	55.323	29765.30
6:58	55.327	29766.16
7:58	55.332	29766.10

SLOPE 0.075 GAL/HR
SLOPE LOW 0.072 GAL/HR
SLOPE HIGH 0.078 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83918
PORTLAND OREGON 97231
1-503-286-0631

05/01/2004 3:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2004
LAST DELIVERY 8:09
LAST DELIVERY 04/07/2004
GROSS CAPACITY 61.9%
BEGIN GROSS 3876.1 GAL
BEGIN NET 3872.8 GAL
BEGIN LEVEL 56.440 IN
BEGIN TEMP 61.856 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.022 IN
END TIME 3:08
END DATE 05/01/2004
END GROSS 3876.2 GAL
END NET 3872.9 GAL
END LEVEL 56.441 IN
END TEMP 61.862 F
END WATER 0.0 GAL
END WATER 0.022 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	61.858	3872.90
1:59	61.860	3872.88
2:58	61.862	3872.94

SLOPE 0.012 GAL/HR
SLOPE LOW 0.011 GAL/HR
SLOPE HIGH 0.013 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

SLOPE 0.012 GAL/HR
SLOPE LOW 0.011 GAL/HR
SLOPE HIGH 0.013 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2004 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2004
LAST DELIVERY 20:21
LAST DELIVERY 04/26/2004
GROSS CAPACITY 24.6%
BEGIN GROSS 4926.5 GAL
BEGIN NET 4924.8 GAL
BEGIN LEVEL 35.046 IN
BEGIN TEMP 60.754 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 05/01/2004
END GROSS 4926.5 GAL
END NET 4924.9 GAL
END LEVEL 35.046 IN
END TEMP 60.690 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	60.744	8385.78
1:58	60.734	8388.82
2:58	60.726	8389.91
3:58	60.717	8388.90
4:58	60.710	8387.96
5:58	60.702	8388.04
6:58	60.696	8388.06
7:58	60.690	8389.01

SLOPE 0.046 GAL/HR
SLOPE LOW 0.035 GAL/HR
SLOPE HIGH 0.057 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2004 8:00

LEAK TEST REPORT

TANK 2 20032.7 GAL

Confidential Business Information

00014222

SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9036 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2004 8:00

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2004
LAST DELIVERY 20:21
LAST DELIVERY 04/26/2004
GROSS CAPACITY 17.3%
BEGIN GROSS 3466.9 GAL
BEGIN NET 3464.0 GAL
BEGIN LEVEL 27.293 IN
BEGIN TEMP 61.854 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 05/01/2004
END GROSS 3466.8 GAL
END NET 3464.1 GAL
END LEVEL 27.293 IN
END TEMP 61.740 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	61.836	8388.76
1:59	61.820	8387.76
2:58	61.805	8387.84
3:59	61.791	8387.94
4:58	61.777	8388.95
5:58	61.764	8388.90
6:58	61.751	8388.94
7:58	61.740	8389.03

SLOPE 0.046 GAL/HR
SLOPE LOW 0.035 GAL/HR
SLOPE HIGH 0.057 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

06/01/2004 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 05/31/2004
LAST DELIVERY 14:09
LAST DELIVERY 05/29/2004
GROSS CAPACITY 38.9%
BEGIN GROSS 7797.2 GAL
BEGIN NET 7774.5 GAL
BEGIN LEVEL 49.046 IN
BEGIN TEMP 63.590 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 06/01/2004
END GROSS 7786.4 GAL
END NET 7773.7 GAL
END LEVEL 49.042 IN
END TEMP 63.604 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	63.592	12270.02
1:58	63.593	12271.98
2:58	63.595	12268.95
3:58	63.596	12272.10
4:58	63.598	12271.11
5:58	63.600	12271.07
6:58	63.602	12271.34
7:58	63.604	12271.52

SLOPE 0.000 GAL/HR
SLOPE LOW 0.062 GAL/HR
SLOPE HIGH 0.000 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

06/01/2004 8:00

LEAK TEST REPORT

TANK 2 20032.7 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

06/01/2004 3:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 05/31/2004
LAST DELIVERY 8:09
LAST DELIVERY 04/07/2004
GROSS CAPACITY 49.9%
BEGIN GROSS 3122.8 GAL
BEGIN NET 3116.6 GAL
BEGIN LEVEL 47.410 IN
BEGIN TEMP 64.368 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.023 IN
END TIME 3:08
END DATE 06/01/2004
END GROSS 3122.8 GAL
END NET 3116.6 GAL
END LEVEL 47.410 IN
END TEMP 64.371 F
END WATER 0.0 GAL
END WATER 0.023 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	64.369	3116.60
1:58	64.370	3116.64
2:58	64.371	3116.66

SLOPE 0.000 GAL/HR
SLOPE LOW 0.007 GAL/HR
SLOPE HIGH 0.000 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 05/31/2004
LAST DELIVERY 14:09
LAST DELIVERY 05/29/2004
GROSS CAPACITY 22.5%
BEGIN GROSS 4505.8 GAL
BEGIN NET 4497.6 GAL
BEGIN LEVEL 32.873 IN
BEGIN TEMP 64.022 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 06/01/2004
END GROSS 4506.0 GAL
END NET 4497.9 GAL
END LEVEL 32.874 IN
END TEMP 63.993 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	64.018	12270.02
1:58	64.013	12271.98
2:58	64.010	12268.95
3:58	64.006	12272.18
4:58	64.003	12271.11
5:58	63.999	12271.07
6:58	63.996	12271.34
7:58	63.993	12271.52

SLOPE 0.000 GAL/HR
SLOPE LOW 0.062 GAL/HR
SLOPE HIGH 0.098 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-266-0631

05/31/2004 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 7787.1 GAL
NET 7774.4 GAL
PROD LEVEL 49.046 IN
GROSS CAPACITY 38.9%
ULLAGE 11243.9 GAL
TEMPERATURE 63.590 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 4505.8 GAL
NET 4497.5 GAL
PROD LEVEL 32.873 IN
GROSS CAPACITY 22.5%
ULLAGE 14525.3 GAL
TEMPERATURE 64.022 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 3122.8 GAL
NET 3116.6 GAL
PROD LEVEL 47.410 IN
GROSS CAPACITY 49.9%
ULLAGE 2824.9 GAL
TEMPERATURE 64.368 F
WATER LEVEL 0.023 IN
WATER VOLUME 0.0 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

07/01/2004 2:59

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 06/30/2004
LAST DELIVERY 8:09
LAST DELIVERY 04/07/2004
GROSS CAPACITY 31.0%
BEGIN GROSS 1939.2 GAL
BEGIN NET 1931.3 GAL
BEGIN LEVEL 33.000 IN
BEGIN TEMP 68.984 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.022 IN
END TIME 2:59
END DATE 07/01/2004
END GROSS 1939.2 GAL
END NET 1931.3 GAL
END LEVEL 33.000 IN
END TEMP 69.012 F
END WATER 0.0 GAL
END WATER 0.022 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	68.994	1931.30
1:58	69.003	1931.31
2:58	69.012	1931.32

SLOPE 0.004 GAL/HR
SLOPE LOW 0.003 GAL/HR
SLOPE HIGH 0.005 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

07/01/2004 4:48

LEAK TEST REPORT

TANK 20032.7 GAL

DIESEL

TEST RESULT ABORTED

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

07/01/2004 4:48

LEAK TEST REPORT

TANK 20032.7 GAL

DIESEL

TEST RESULT ABORTED

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

06/30/2004 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 7326.4 GAL
NET 7292.9 GAL
PROD LEVEL 46.854 IN
GROSS CAPACITY 36.6%
ULLAGE 11706.5 GAL
TEMPERATURE 70.073 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 6921.5 GAL
NET 6889.1 GAL
PROD LEVEL 44.914 IN
GROSS CAPACITY 34.6%
ULLAGE 12109.5 GAL
TEMPERATURE 70.299 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 1939.2 GAL
NET 1931.3 GAL
PROD LEVEL 33.000 IN
GROSS CAPACITY 31.0%
ULLAGE 4008.5 GAL
TEMPERATURE 68.984 F
WATER LEVEL 0.022 IN
WATER VOLUME 0.0 GAL

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

08/01/2004 3:08

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 07/31/2004
LAST DELIVERY 5:46
LAST DELIVERY 07/28/2004
GROSS CAPACITY 90.8%
BEGIN GROSS 5685.9 GAL
BEGIN NET 5627.8 GAL
BEGIN LEVEL 80.985 IN
BEGIN TEMP 82.404 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.038 IN
END TIME 3:08
END DATE 08/01/2004
END GROSS 5685.8 GAL
END NET 5627.9 GAL
END LEVEL 80.984 IN
END TEMP 82.336 F
END WATER 0.1 GAL
END WATER 0.038 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	82.382	5627.88
1:58	82.361	5627.94
2:58	82.340	5628.01

SLOPE 0.031 GAL/HR
SLOPE LOW 0.029 GAL/HR
SLOPE HIGH 0.032 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

08/01/2004

7:58

TANK TEST REPORT

TANK 1 120032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 07/31/2004
LAST DELIVERY 22:12
LAST DELIVERY 07/29/2004
GROSS CAPACITY 39.2%
BEGIN GROSS 7658.4 GAL
BEGIN NET 7600.2 GAL
BEGIN LEVEL 48.435 IN
BEGIN TEMP 76.697 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN

END TIME 7:58
END DATE 08/01/2004
END GROSS 5839.0 GAL
END NET 5793.2 GAL
END LEVEL 39.635 IN
END TEMP 77.258 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	76.688	15502.78
1:58	76.678	15502.69
2:58	76.669	15502.93
3:58	76.659	15502.88
4:58	76.667	15488.82
5:58	77.379	11248.51
6:58	77.286	11247.98
7:58	77.258	11247.99

SLOPE -682.018 GAL/HR
SLOPE LO -695.247 GAL/HR
SLOPE HI -668.789 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

08/01/2004

7:59

Fueling occurred

LEAK TEST REPORT

TANK 2 20632.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 07/31/2004
LAST DELIVERY 22:12
LAST DELIVERY 07/29/2004
GROSS CAPACITY 39.7%
BEGIN GROSS 7962.6 GAL
BEGIN NET 7902.3 GAL
BEGIN LEVEL 49.876 IN
BEGIN TEMP 76.657 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 08/01/2004
END GROSS 5497.7 GAL
END NET 5454.8 GAL
END LEVEL 37.936 IN
END TEMP 77.119 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	76.648	15502.78
1:58	76.640	15502.69
2:58	76.631	15502.93
3:58	76.623	15502.88
4:58	76.694	15488.82
5:58	77.048	11248.51
6:58	77.102	11247.98
7:58	77.119	11247.99

SLOPE -682.018 GAL/HR
SLOPE LO -695.247 GAL/HR
SLOPE HI -668.788 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/13/2004 15:00

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 7:00
TEST STARTED 09/13/2004
LAST DELIVERY 20:34
LAST DELIVERY 09/10/2004
GROSS CAPACITY 48.4%
BEGIN GROSS 9691.8 GAL
BEGIN NET 9627.7 GAL
BEGIN LEVEL 57.986 IN
BEGIN TEMP 74.540 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:00
END DATE 09/13/2004
END GROSS 9692.1 GAL
END NET 9627.9 GAL
END LEVEL 57.987 IN
END TEMP 74.548 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:00	74.541	20147.71
9:00	74.542	20147.93
10:00	74.543	20147.87
11:00	74.544	20147.93
12:00	74.545	20148.12
13:00	74.546	20147.95
14:00	74.547	20147.78
15:00	74.548	20147.85

SLOPE 0.006 GAL/HR
SLOPE LOW 0.002 GAL/HR
SLOPE HIGH 0.011 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/13/2004 15:01

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 7:00
TEST STARTED 09/13/2004
LAST DELIVERY 20:34
LAST DELIVERY 09/10/2004
GROSS CAPACITY 52.9%

BEGIN GROSS 10590.1 GAL
BEGIN NET 10520.0 GAL
BEGIN LEVEL 62.178 IN
BEGIN TEMP 74.537 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:00
END DATE 09/13/2004
END GROSS 10590.2 GAL
END NET 10520.0 GAL
END LEVEL 62.178 IN
END TEMP 74.549 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:00	74.539	20147.86
9:00	74.540	20148.14
10:00	74.542	20150.20
11:00	74.543	20147.98
12:00	74.545	20148.02
13:00	74.546	20147.89
14:00	74.548	20147.67
15:00	74.549	20147.87

SLOPE 0.006 GAL/HR
SLOPE LOW 0.002 GAL/HR
SLOPE HIGH 0.010 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9870 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

10/07/2004 15:07

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 7:07
TEST STARTED 10/07/2004
LAST DELIVERY 18:19
LAST DELIVERY 10/04/2004
GROSS CAPACITY 74.32
BEGIN GROSS 14883.5 GAL
BEGIN NET 14815.5 GAL
BEGIN LEVEL 82.819 IN
BEGIN TEMP 70.055 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:07
END DATE 10/07/2004
END GROSS 14881.8 GAL
END NET 14813.6 GAL
END LEVEL 82.811 IN
END TEMP 70.076 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:07	70.058	30345.42
9:07	70.060	30346.47
10:07	70.063	30341.54
11:07	70.065	30350.27
12:07	70.067	30345.41
13:07	70.070	30348.22
14:07	70.073	30348.97
15:07	70.076	30339.96

SLOPE -0.009 GAL/HR
SLOPE LOW -0.047 GAL/HR
SLOPE HIGH 0.030 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9634 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

10/07/2004 15:00

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 7:07
TEST STARTED 10/07/2004
LAST DELIVERY 18:19
LAST DELIVERY 10/04/2004
GROSS CAPACITY 77.9%
BEGIN GROSS 15597.1 GAL
BEGIN NET 15526.5 GAL
BEGIN LEVEL 86.494 IN
BEGIN TEMP 69.957 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:07
END DATE 10/07/2004
END GROSS 15597.2 GAL
END NET 15526.3 GAL
END LEVEL 86.495 IN
END TEMP 69.988 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:07	69.961	30345.42
9:07	69.964	30346.47
10:07	69.968	30341.54
11:07	69.972	30350.27
12:07	69.976	30345.41
13:07	69.980	30348.22
14:07	69.984	30348.97
15:07	69.988	30339.96

SLOPE -0.009 GAL/HR
SLOPE LOW -0.047 GAL/HR
SLOPE HIGH 0.030 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME on

ROSS-MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

10/07/2004

10:17

LEAK TEST REPORT

TANK 3

6260.8 GAL

30 WT OIL

LEAK TEST
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 0.050 GPH
TEST STARTED 7:07
TEST STARTED 10/07/2004
LAST DELIVERY 10/07/2004
LAST DELIVERY 5:46
GROSS CAPACITY 42.8%
BEGIN GROSS 2681.2 GAL
BEGIN NET 2665.5 GAL
BEGIN LEVEL 42.136 IN
BEGIN TEMP 72.804 F
BEGIN WATER 0.1 GAL
END TIME 0.037 IN
END DATE 10:17
END GROSS 10/07/2004
END NET 2681.2 GAL
END LEVEL 2665.6 GAL
END TEMP 42.137 IN
END WATER 72.799 F
END WATER 0.1 GAL
END WATER 0.038 IN

HOURLY DATA

TIME	DEG F	GAL
8:07	72.799	2665.66
9:07	72.793	2665.67
10:07	72.790	2665.70
SLOPE	0.014	GAL/HR
SLOPE LOW	0.013	GAL/HR
SLOPE HIGH	0.015	GAL/HR
TEST RESULT	PASSED	
SLOPE EQUALS	CALCULATED	
LEAK RATE		

FOSS MARITIME
9070 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

11/01/2004 7:58

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPM
LEAK THRESHOLD 0.100 GPM
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 10/31/2004
LAST DELIVERY 16:38
LAST DELIVERY 10/29/2004
GROSS CAPACITY 65.5%
BEGIN GROSS 13120.8 GAL
BEGIN NET 13108.5 GAL
BEGIN LEVEL 74.129 IN
BEGIN TEMP 61.925 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 11/01/2004
END GROSS 13120.8 GAL
END NET 13108.7 GAL
END LEVEL 74.133 IN
END TEMP 62.031 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	61.938	26957.94
1:58	61.952	26957.53
2:58	61.966	26957.72
3:58	61.979	26957.98
4:58	61.992	26957.84
5:58	62.006	26958.15
6:58	62.018	26957.49
7:58	62.031	26957.33

SLOPE 0.068 GAL/HR
SLOPE LOW 0.062 GAL/HR
SLOPE HIGH 0.073 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9070 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

11/01/2004

LEAK TEST REPORT

TANK 3

6760.8 GAL

30 WT OIL

LEAK TEST 0.200 GPM
LEAK THRESHOLD 0.100 GPM
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 10/31/2004
LAST DELIVERY 5:46
LAST DELIVERY 07/28/2004
GROSS CAPACITY 24.6%
BEGIN GROSS 1541.9 GAL
BEGIN NET 1536.5 GAL
BEGIN LEVEL 28.007 IN
BEGIN TEMP 67.561 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.034 IN
END TIME 2:53
END DATE 11/01/2004
END GROSS 1541.9 GAL
END NET 1536.6 GAL
END LEVEL 28.008 IN
END TEMP 67.525 F
END WATER 0.1 GAL
END WATER 0.034 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	67.547	1536.60
1:58	67.531	1536.65

SLOPE 0.005 GAL/HR
SLOPE LOW 0.005 GAL/HR
SLOPE HIGH 0.006 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

11/01/2004 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 10/31/2004
LAST DELIVERY 16:38
LAST DELIVERY 10/29/2004
GROSS CAPACITY 69.2%
BEGIN GROSS 13861.3 GAL
BEGIN NET 13849.0 GAL
BEGIN LEVEL 77.728 IN
BEGIN TEMP 61.955 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 11/01/2004
END GROSS 13861.7 GAL
END NET 13848.6 GAL
END LEVEL 77.730 IN
END TEMP 62.074 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	61.970	26957.94
1:58	61.986	26957.53
2:58	62.001	26957.72
3:58	62.016	26957.98
4:58	62.031	26957.84
5:58	62.046	26958.15
6:58	62.060	26957.49
7:58	62.074	26957.33

SLOPE 0.068 GAL/HR
SLOPE LOW 0.062 GAL/HR
SLOPE HIGH 0.073 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS-MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

01/01/2005 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 7:59
TEST STOPPED 12/31/2004
LAST DELIVERY 21:08
LAST DELIVERY 12/30/2004
GROSS CAPACITY 75.8%
BEGIN GROSS 15180.3 GAL
BEGIN NET 15226.3 GAL
BEGIN LEVEL 84.333 IN
BEGIN TEMP 53.318 F
BEGIN WATER 0.0 GAL
END TIME 7:59
END DATE 01/01/2005
END GROSS 15180.4 GAL
END NET 15226.2 GAL
END LEVEL 84.334 IN
END TEMP 53.350 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	53.321	29929.58
1:58	53.325	29929.52
2:58	53.327	29929.45
3:58	53.325	29929.57
4:58	53.338	29929.33
5:58	53.337	29929.23
6:58	53.346	29929.25
7:58	53.350	29929.44

SLOPE -0.048 GAL/HR
SLOPE LOW -0.049 GAL/HR
SLOPE HIGH -0.046 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS-MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

01/04/2005 10:59

LEAK TEST REPORT

TANK 2 6260.8 GAL

30 WT OIL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 7:49
TEST STOPPED 01/04/2005
LAST DELIVERY 7:05
LAST DELIVERY 12/09/2004
GROSS CAPACITY 77.9%
BEGIN GROSS 4878.6 GAL
BEGIN NET 4882.0 GAL
BEGIN LEVEL 69.104 IN
BEGIN TEMP 58.458 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.027 IN
END TIME 10:59
END DATE 01/04/2005
END GROSS 4878.4 GAL
END NET 4881.9 GAL
END LEVEL 69.102 IN
END TEMP 58.407 F
END WATER 0.1 GAL
END WATER 0.027 IN

HOURLY DATA

TIME	DEG F	GAL
8:49	58.467	4881.99
9:49	58.433	4881.96
10:49	58.407	4881.95

SLOPE -0.034 GAL/HR
SLOPE LOW -0.035 GAL/HR
SLOPE HIGH -0.032 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE



FOSS-MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

12/31/2004 73:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 15180.3 GAL
NET 15226.3 GAL
PROD LEVEL 84.333 IN
GROSS CAPACITY 75.8%
ULLAGE 3850.8 GAL
TEMPERATURE 53.318 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 14667.5 GAL
NET 14703.3 GAL
PROD LEVEL 81.703 IN
GROSS CAPACITY 73.2%
ULLAGE 4368.5 GAL
TEMPERATURE 53.877 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 4944.0 GAL
NET 4945.4 GAL
PROD LEVEL 69.985 IN
GROSS CAPACITY 79.0%
ULLAGE 1003.7 GAL
TEMPERATURE 59.389 F
WATER LEVEL 0.029 IN
WATER VOLUME 0.1 GAL

POSS MARITIME
4070 NW ST HELENS RD
P.O. BOX-83818
PORTLAND OREGON 97231
1-503-286-8631

01/01/2005 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 12/31/2004
LAST DELIVERY 21:08
LAST DELIVERY 12/30/2004
GROSS CAPACITY 73.2%
BEGIN GROSS 14662.6 GAL
BEGIN NET 14703.3 GAL
BEGIN LEVEL 81.704 IN
BEGIN TEMP 53.877 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 01/01/2005
END GROSS 14662.8 GAL
END NET 14703.2 GAL
END LEVEL 81.705 IN
END TEMP 53.920 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	53.896	29929.58
1:58	53.889	29929.52
2:58	53.902	29929.45
3:58	53.912	29929.57
4:58	53.917	29929.33
5:58	53.925	29929.23
6:58	53.928	29929.25
7:58	53.920	29929.44

SLOPE -0.048 GAL/HR
SLOPE LOW -0.049 GAL/HR
SLOPE HIGH -0.046 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENE RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

02/01/2005 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPM
LEAK THRESHOLD 0.100 GPM
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 01/31/2005
LAST DELIVERY 28:03
LAST DELIVERY 01/31/2005
GROSS CAPACITY 82.2%
BEGIN GROSS 16468.8 GAL
BEGIN NET 16543.2 GAL
BEGIN LEVEL 91.170 IN
BEGIN TEMP 50.036 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 02/01/2005
END GROSS 16470.6 GAL
END NET 16543.0 GAL
END LEVEL 91.180 IN
END TEMP 50.303 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	50.061	31217.66
1:58	50.000	31217.72
2:58	50.123	31217.34
3:58	50.161	31217.30
4:58	50.205	31217.29
5:58	50.229	31217.47
6:58	50.257	31218.07
7:58	50.303	31218.14

SLOPE 0.025 GAL/HR
SLOPE LOW 0.021 GAL/HR
SLOPE HIGH 0.029 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENE RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

02/01/2005 3:08

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPM
LEAK THRESHOLD 0.100 GPM
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 01/31/2005
LAST DELIVERY 21:45
LAST DELIVERY 01/31/2005
GROSS CAPACITY 67.4%
BEGIN GROSS 4218.4 GAL
BEGIN NET 4229.3 GAL
BEGIN LEVEL 60.636 IN
BEGIN TEMP 54.282 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.021 IN
END TIME 3:08
END DATE 02/01/2005
END GROSS 4218.4 GAL
END NET 4229.4 GAL
END LEVEL 60.636 IN
END TEMP 54.280 F
END WATER 0.0 GAL
END WATER 0.021 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	54.281	4229.43
1:58	54.281	4229.43
2:58	54.280	4229.40

SLOPE 0.001 GAL/HR
SLOPE LOW -0.001 GAL/HR
SLOPE HIGH 0.002 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

REAL TIME
9037 NW ST ASLENS RD.
P. O. BOX 83818
PORTLAND OREGON 97231
1-503-286-0631

02/01/2005 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 01/31/2005
LAST DELIVERY 18:03
LAST DELIVERY 01/31/2005
GROSS CAPACITY 72.9%
BEGIN GROSS 14685.6 GAL
BEGIN NET 14674.5 GAL
BEGIN LEVEL 81.417 IN
BEGIN TEMP 49.601 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME
END DATE 01/31/2005
END GROSS 14674.5 GAL
END NET 14674.5 GAL
END LEVEL 81.430 IN
END TEMP 49.892 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	49.646	31217.66
1:58	49.687	31217.72
2:58	49.726	31217.34
3:58	49.762	31217.30
4:58	49.798	31217.29
5:58	49.829	31217.47
6:58	49.861	31218.07
7:58	49.892	31218.14

SLOPE 0.025 GAL/HR
SLOPE LOW 0.021 GAL/HR
SLOPE HIGH 0.029 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

03/01/2005 3:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 02/28/2005
LAST DELIVERY 7:05
LAST DELIVERY 12/09/2004
GROSS CAPACITY 52.1%
BEGIN GROSS 3261.3 GAL
BEGIN NET 3270.9 GAL
BEGIN LEVEL 49.061 IN
BEGIN TEMP 53.520 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.019 IN
END TIME 3:00
END DATE 03/01/2005
END GROSS 3261.3 GAL
END NET 3270.9 GAL
END LEVEL 49.061 IN
END TEMP 53.530 F
END WATER 0.0 GAL
END WATER 0.019 IN

HOURLY DATA

TIME	DEG F	GAL
0:50	53.523	3270.92
1:58	53.525	3270.93
2:50	53.529	3270.94

SLOPE LOW -0.003 GAL/HR
SLOPE HIGH -0.002 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

02/28/2005 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 10451.2 GAL
NET 10677.1 GAL
PROD LEVEL 62.463 IN
GROSS CAPACITY 53.2%
ULLAGE 8379.8 GAL
TEMPERATURE 54.649 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 8017.4 GAL
NET 8031.4 GAL
PROD LEVEL 50.135 IN
GROSS CAPACITY 40.0%
ULLAGE 11013.7 GAL
TEMPERATURE 56.136 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 3261.3 GAL
NET 3270.9 GAL
PROD LEVEL 49.061 IN
GROSS CAPACITY 52.1%
ULLAGE 2686.4 GAL
TEMPERATURE 53.520 F
WATER LEVEL 0.019 IN
WATER VOLUME 0.0 GAL

ROSS MARITIME
9030 NW ST MICHAEL RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

03/31/2005

23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN
PRODUCT DIESEL
GROSS 15901.8 GAL
NET 16032.6 GAL
PROD LEVEL 80.578 IN
GROSS CAPACITY 79.8%
ULLAGE 3040.0 GAL
TEMPERATURE 54.276 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN
PRODUCT DIESEL
GROSS 16655.7 GAL
NET 16700.8 GAL
PROD LEVEL 92.207 IN
GROSS CAPACITY 83.1%
ULLAGE 2375.3 GAL
TEMPERATURE 54.038 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 1879.1 GAL
NET 1982.4 GAL
PROD LEVEL 32.326 IN
GROSS CAPACITY 30.0%
ULLAGE 4068.6 GAL
TEMPERATURE 56.007 F
WATER LEVEL 0.019 IN
WATER VOLUME 0.0 GAL

ROSS MARITIME
4030 NW ST HELENA RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

04/01/2005 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPM
LEAK THRESHOLD 0.100 GPM
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 03/31/2005
LAST DELIVERY 5:59
LAST DELIVERY 03/30/2005
GROSS CAPACITY 79.8%
BEGIN GROSS 15991.0 GAL
BEGIN NET 16032.6 GAL
BEGIN LEVEL 88.578 IN
BEGIN TEMP 54.276 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:59
END DATE 04/01/2005
END GROSS 15991.4 GAL
END NET 16032.6 GAL
END LEVEL 88.580 IN
END TEMP 54.329 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:59	54.296	32733.44
1:59	54.294	32733.76
2:59	54.300	32733.90
3:59	54.308	32733.82
4:59	54.316	32733.69
5:59	54.321	32733.60
6:59	54.325	32733.59
7:59	54.329	32734.02

SLOPE -0.006 GAL/HR
SLOPE LOW -0.009 GAL/HR
SLOPE HIGH -0.004 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE



ROSS MARITIME

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

MADE IN CHINA

LEAK TEST REPORT

TANK 2

20032.7 GAL

DIESEL

LEAK TEST
LEAK THRESHOLD 0.200 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
LAST DELIVERY 03/31/2005
LAST DELIVERY 03/30/2005
GROSS CAPACITY 83.1%
BEGIN GROSS 16655.7 GAL
BEGIN NET 16700.8 GAL
BEGIN LEVEL 92.207 IN
BEGIN TEMP 54.038 F
BEGIN WATER 0.0 GAL
END TIME 7:59
END DATE 04/01/2005
END GROSS 16656.9 GAL
END NET 16701.5 GAL
END LEVEL 92.214 IN
END TEMP 54.106 F
END WATER 0.0 GAL

HOURLY DATA

TIME	DEG F	GAL
0:59	54.044	32733.64
1:59	54.054	32733.76
2:59	54.062	32733.94
3:59	54.069	32733.82
4:59	54.081	32733.59
5:59	54.089	32733.68
6:59	54.098	32733.59
7:59	54.106	32734.02

SLOPE
SLOPE LOW -0.006 GAL/HR
SLOPE HIGH -0.000 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE



wow!

TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

03/31/2005

23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MAINTAINED MAX
PRODUCT DIESEL
GROSS 15901.0 GAL
NET 16032.6 GAL
PROD LEVEL 88.578 IN
GROSS CAPACITY 79.8%
ULLAGE 3040.0 GAL
TEMPERATURE 54.276 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MAINTAINED MAX
PRODUCT DIESEL
GROSS 16655.7 GAL
NET 16700.8 GAL
PROD LEVEL 92.207 IN
GROSS CAPACITY 83.1%
ULLAGE 2375.3 GAL
TEMPERATURE 54.038 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 1879.1 GAL
NET 1982.4 GAL
PROD LEVEL 32.326 IN
GROSS CAPACITY 30.0%
ULLAGE 4068.6 GAL
TEMPERATURE 56.087 F
WATER LEVEL 0.019 IN
WATER VOLUME 0.0 GAL

FOSS MARITIME
9830 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

04/01/2005 2:59

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 03/31/2005
LAST DELIVERY 7:05
LAST DELIVERY 12/09/2004
GROSS CAPACITY 30.0%
BEGIN GROSS 1879.1 GAL
BEGIN NET 1882.4 GAL
BEGIN LEVEL 32.325 IN
BEGIN TEMP 56.087 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.019 IN
END TIME 2:58
END DATE 04/01/2005
END GROSS 1879.2 GAL
END NET 1882.5 GAL
END LEVEL 32.327 IN
END TEMP 56.083 F
END WATER 0.0 GAL
END WATER 0.019 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	56.084	1882.46
1:58	56.085	1882.46
2:58	56.083	1882.55

SLOPE - 0.047 GAL/HR
SLOPE LOW 0.046 GAL/HR
SLOPE HIGH 0.049 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83010
PORTLAND OREGON 97231
1-503-286-2631

05/01/2005 21:34

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.000 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2005
LAST DELIVERY 7:05
LAST DELIVERY 12/09/2004
GROSS CAPACITY 15.7%
BEGIN GROSS 985.2 GAL
BEGIN NET 985.4 GAL
BEGIN LEVEL 20.339 IN
BEGIN TEMP 59.526 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.020 IN
END TIME 2:33
END DATE 05/01/2005
END GROSS 985.2 GAL
END NET 985.4 GAL
END LEVEL 20.380 IN
END TEMP 59.551 F
END WATER 0.0 GAL
END WATER 0.020 IN

HOURLY DATA

TIME	DEG F	GAL
0:50	59.536	985.44
1:59	59.545	985.42

SLOPE -0.004 GAL/HR
SLOPE LOW -0.005 GAL/HR
SLOPE HIGH -0.003 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83010
PORTLAND OREGON 97231
1-503-286-0631

04/30/2005 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 16918.1 GAL
NET 16885.0 GAL
PROD LEVEL 93.687 IN
GROSS CAPACITY 84.4%
ULLAGE 2113.0 GAL
TEMPERATURE 64.298 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 13979.3 GAL
NET 13948.1 GAL
PROD LEVEL 78.397 IN
GROSS CAPACITY 69.8%
ULLAGE 5051.8 GAL
TEMPERATURE 64.903 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 985.2 GAL
NET 985.4 GAL
PROD LEVEL 20.380 IN
GROSS CAPACITY 15.7%
ULLAGE 4962.5 GAL
TEMPERATURE 59.526 F
WATER LEVEL 0.019 IN
WATER VOLUME 0.0 GAL

ROSS MARITIME
9030 NW 87th Ave PO
P. O. BOX 83818
PORTLAND OREGON 97231
1-503-266-9631

05/01/2005 7:30

LEAK TEST REPORT

TANK 20032.7 GAL

LEAK TEST 0.200 GAL
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2005
LAST DELIVERY 19:51
LAST DELIVERY 04/30/2005
GROSS CAPACITY 84.5%
BEGIN GROSS 16918.7 GAL
BEGIN NET 16885.0 GAL
BEGIN LEVEL 93.687 IN
BEGIN TEMP 64.298 F
BEGIN WATER 0.0 GAL
END TIME 0.000 IN
END DATE 05/01/2005
END GROSS 16916.2 GAL
END NET 16885.0 GAL
END LEVEL 93.677 IN
END TEMP 64.849 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
01:59	64.258	30831.17
1:59	64.221	30831.59
2:59	64.180	30833.91
3:59	64.156	30832.38
4:59	64.129	30832.59
5:59	64.102	30833.48
6:59	64.075	30832.44
7:59	64.049	30832.21

SLOPE -0.050 GAL/HR
SLOPE LOW -0.053 GAL/HR
SLOPE HIGH -0.047 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

9070 W. STEEL RD.
P.O. BOX 870
PORTLAND, OREGON 97227
1-503-294-0630

05/01/2005

LEAK TEST REPORT

TANK 2

20032.7 GAL

DIESEL

LEAK TEST
LEAK THRESHOLD 0.000 GAL
CONFIDENCE LEAK 0.000
TEST STARTED 04/30/2005
TEST STARTED 04/30/2005
LAST DELIVERY 04/30/2005
LAST DELIVERY 69.8%
GROSS CAPACITY 13979.4 GAL
GROSS GROSS 13948.2 GAL
BEGIN NET 78.306 IN
BEGIN LEVEL 64.883 F
BEGIN TEMP 0.000 IN
BEGIN WATER 0.000 IN
BEGIN WATER 7:50
END TIME 05/01/2005
END DATE 13977.1 GAL
END GROSS 13947.7 GAL
END NET 78.297 IN
END LEVEL 64.637 F
END TEMP 0.000 IN
END WATER 0.000 IN

HOURLY DATA

TIME	DEB = GAL
0:58	64.877 30833.17
1:58	64.844 30831.58
2:58	64.805 30833.51
3:58	64.770 30832.38
4:58	64.721 30832.99
5:58	64.706 30833.40
6:58	64.671 30832.60
7:58	64.637 30832.71

SLOPE LOW -0.054 GAL/HR
SLOPE HIGH -0.063 GAL/HR
SLOPE RESULT -0.040 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS 0.040 GAL/HR
LEAK RATE

FORS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2005 31:00

TANK TEST REPORT

TANK 1 20032.7 GAL

30 WT OIL

LEAK TEST 0.200 GAL
LEAK THRESHOLD 0.100 GAL
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STOPPED 05/01/2005
LAST DELIVERY 9:10
LAST DELIVERY 05/01/2005
GROSS CAPACITY 77.3%
BEGIN GROSS 4836.5 GAL
BEGIN NET 4816.7 GAL
BEGIN LEVEL 68.543 IN
BEGIN TEMP 69.016 F
BEGIN WATER 0.1 GAL
END WATER 0.029 IN

END DATE 05/01/2005
END GROSS 4836.5 GAL
END NET 4816.7 GAL
END LEVEL 68.543 IN
END TEMP 69.016 F
END WATER 0.1 GAL
END WATER 0.029 IN

HOURLY DATA

TIME	GROSS = GAL	NET = GAL
0:50	69.000	4816.75
1:50	69.000	4816.77
2:50	69.992	4816.79

SLOPE 0.020 GAL/HR
SLOPE LOW 0.019 GAL/HR
SLOPE HIGH 0.021 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FORS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/31/2005 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 4372.9 GAL
NET 4364.3 GAL
PROD LEVEL 32.177 IN
GROSS CAPACITY 21.8%
ULLAGE 14658.2 GAL
TEMPERATURE 64.327 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 4083.2 GAL
NET 4074.8 GAL
PROD LEVEL 30.644 IN
GROSS CAPACITY 20.4%
ULLAGE 14947.8 GAL
TEMPERATURE 64.539 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 4836.5 GAL
NET 4816.6 GAL
PROD LEVEL 68.543 IN
GROSS CAPACITY 77.3%
ULLAGE 1111.2 GAL
TEMPERATURE 69.016 F
WATER LEVEL 0.029 IN
WATER VOLUME 0.1 GAL

FOSS MARITIME
9070 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

08/01/2005 7:58

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 07/31/2005
LAST DELIVERY 1:06
LAST DELIVERY 07/30/2005
GROSS CAPACITY 61.4%
BEGIN GROSS 12290.4 GAL
BEGIN NET 12208.3 GAL
BEGIN LEVEL 70.167 IN
BEGIN TEMP 74.673 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58

END DATE 08/01/2005
END GROSS 12287.4 GAL
END NET 12205.6 GAL
END LEVEL 70.153 IN
END TEMP 74.621 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	74.665	25275.36
1:58	74.659	25275.31
2:58	74.652	25275.51
3:58	74.645	25275.55
4:58	74.639	25275.79
5:58	74.633	25275.51
6:58	74.627	25275.50
7:58	74.621	25275.28

SLOPE 0.015 GAL/HR
SLOPE LOW 0.014 GAL/HR
SLOPE HIGH 0.017 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9070 NW ST HELENS RD

FOSS MARITIME
9070 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

07/31/2005 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 12290.4 GAL
NET 12208.3 GAL
PROD LEVEL 70.167 IN
GROSS CAPACITY 61.4%
ULLAGE 6740.6 GAL
TEMPERATURE 74.673 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 13157.0 GAL
NET 13067.1 GAL
PROD LEVEL 74.307 IN
GROSS CAPACITY 65.7%
ULLAGE 5874.0 GAL
TEMPERATURE 75.022 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 1850.1 GAL
NET 1838.7 GAL
PROD LEVEL 31.961 IN
GROSS CAPACITY 29.6%
ULLAGE 4097.6 GAL
TEMPERATURE 73.589 F
WATER LEVEL 0.023 IN
WATER VOLUME 0.0 GAL

P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-8631

08/01/2005

7:59

LEAK TEST REPORT

TANK 2 29832.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 07/31/2005
LAST DELIVERY 1:06
LAST DELIVERY 07/30/2005
GROSS CAPACITY -65.7%
BEGIN GROSS 13157.0 GAL
BEGIN NET 13067.1 GAL
BEGIN LEVEL 74.307 IN
BEGIN TEMP 75.022 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 08/01/2005
END GROSS 13159.4 GAL
END NET 13069.7 GAL
END LEVEL 74.319 IN
END TEMP 74.979 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	75.016	25275.36
1:58	75.011	25275.31
2:58	75.006	25275.51
3:58	75.000	25275.55
4:58	74.995	25275.79
5:58	74.990	25275.51
6:58	74.984	25275.50
7:58	74.979	25275.28

SLOPE 0.015 GAL/HR
SLOPE LOW 0.014 GAL/HR
SLOPE HIGH 0.017 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-8631

08/01/2005

2:58

LEAK TEST REPORT

TANK 3 6200.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 07/31/2005
LAST DELIVERY 9:18
LAST DELIVERY 05/19/2005
GROSS CAPACITY 29.6%
BEGIN GROSS 1850.1 GAL
BEGIN NET 1838.7 GAL
BEGIN LEVEL 31.961 IN
BEGIN TEMP 73.589 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.023 IN
END TIME 2:58
END DATE 08/01/2005
END GROSS 1850.2 GAL
END NET 1838.7 GAL
END LEVEL 31.962 IN
END TEMP 73.614 F
END WATER 0.0 GAL
END WATER 0.023 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	73.597	1838.74
1:58	73.606	1838.78
2:58	73.614	1838.74

SLOPE 0.023 GAL/HR
SLOPE LOW 0.022 GAL/HR
SLOPE HIGH 0.024 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83818
PORTLAND OREGON 97231
1-503-286-0631

09/01/2005 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 08/31/2005
LAST DELIVERY 18:09
LAST DELIVERY 08/30/2005
GROSS CAPACITY 43.12

BEGIN GROSS 8625.5 GAL
BEGIN NET 8549.6 GAL
BEGIN LEVEL 52.998 IN
BEGIN TEMP 79.320 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 09/01/2005
END GROSS 8624.1 GAL
END NET 8549.0 GAL
END LEVEL 52.991 IN
END TEMP 79.123 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	79.294	15970.58
1:58	79.268	15970.62
2:58	79.243	15970.89
3:58	79.218	15970.91
4:58	79.193	15970.46
5:58	79.170	15970.36
6:58	79.146	15970.64
7:58	79.123	15970.71

SLOPE 0.013 GAL/HR
SLOPE LOW 0.011 GAL/HR
SLOPE HIGH 0.015 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/01/2005 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 08/31/2005
LAST DELIVERY 18:09
LAST DELIVERY 08/30/2005
GROSS CAPACITY 37.4%
BEGIN GROSS 7487.0 GAL
BEGIN NET 7420.8 GAL
BEGIN LEVEL 47.620 IN
BEGIN TEMP 79.404 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:59
END DATE 09/01/2005
END GROSS 7487.1 GAL
END NET 7421.7 GAL
END LEVEL 47.620 IN
END TEMP 79.180 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:59	79.376	15970.45
1:58	79.347	15970.67
2:58	79.318	15970.80
3:58	79.290	15970.97
4:59	79.262	15970.35
5:58	79.233	15970.61
6:58	79.206	15970.64
7:59	79.180	15970.66

SLOPE 0.013 GAL/HR
SLOPE LOW 0.011 GAL/HR
SLOPE HIGH 0.015 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/01/2005

LEAK TEST REPORT

TANK 3 6260.8 GAL
30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 08/31/2005
LAST DELIVERY 9:01
LAST DELIVERY 08/26/2005
GROSS CAPACITY 79.3%
BEGIN GROSS 4967.3 GAL
BEGIN NET 4919.0 GAL
BEGIN LEVEL 70.301 IN
BEGIN TEMP 81.355 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.038 IN
END TIME 3:09
END DATE 09/01/2005
END GROSS 4967.3 GAL
END NET 4919.1 GAL
END LEVEL 70.301 IN
END TEMP 81.304 F
END WATER 0.1 GAL
END WATER 0.038 IN

HOURLY DATA

TIME	DEG F	GAL
0:59	81.332	4919.11
1:58	81.322	4919.17
2:58	81.306	4919.16

SLOPE 0.037 GAL/HR
SLOPE LOW 0.037 GAL/HR
SLOPE HIGH 0.038 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

10/01/2005 3:00

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 09/30/2005
LAST DELIVERY 9:01
LAST DELIVERY 08/26/2005
GROSS CAPACITY 56.5%
BEGIN GROSS 3536.3 GAL
BEGIN NET 3511.7 GAL
BEGIN LEVEL 52.347 IN
BEGIN TEMP 75.279 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.040 IN
END TIME -3:00
END DATE 10/01/2005
END GROSS 3536.3 GAL
END NET 3511.7 GAL
END LEVEL 52.347 IN
END TEMP 75.258 F
END WATER 0.1 GAL
END WATER 0.040 IN

HOURLY DATA

TIME	DEG F	GAL
0:50	75.275	3511.81
1:50	75.269	3511.82
2:50	75.261	3511.82

SLOPE 0.008 GAL/HR
SLOPE LOW 0.007 GAL/HR
SLOPE HIGH 0.010 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/30/2005 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 14048.4 GAL
NET 13956.9 GAL
PROD LEVEL 78.648 IN
GROSS CAPACITY 70.1%
ULLAGE 4982.6 GAL
TEMPERATURE 74.310 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 11702.7 GAL
NET 11625.3 GAL
PROD LEVEL 67.391 IN
GROSS CAPACITY 58.4%
ULLAGE 7328.3 GAL
TEMPERATURE 74.534 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 3536.3 GAL
NET 3511.7 GAL
PROD LEVEL 52.347 IN
GROSS CAPACITY 56.5%
ULLAGE 2411.3 GAL
TEMPERATURE 75.279 F
WATER LEVEL 0.040 IN
WATER VOLUME 0.1 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

10/01/2005 7:59

LEAK TEST REPORT

TANK 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPM
LEAK THRESHOLD 0.100 GPM
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 09/30/2005
LAST DELIVERY 18:36
LAST DELIVERY 09/28/2005
GROSS CAPACITY 70.1%
BEGIN GROSS 14049.4 GAL
BEGIN NET 13956.9 GAL
BEGIN FUEL 78.648 IN
BEGIN TEMP 74.310 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:59
END DATE 10/01/2005
END GROSS 14042.7 GAL
END NET 13951.0 GAL
END LEVEL 78.617 IN
END TEMP 74.267 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	74.305	25578.20
1:58	74.299	25586.18
2:58	74.294	25581.14
3:58	74.289	25579.21
4:58	74.284	25581.31
5:58	74.278	25580.30
6:58	74.273	25578.84
7:58	74.267	25577.48

SLOPE 0.140 GAL/HR
SLOPE LOW 0.096 GAL/HR
SLOPE HIGH 0.285 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-296-0631

11/01/2005 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 10/31/2005
LAST DELIVERY 19:57
LAST DELIVERY 10/29/2005
GROSS CAPACITY 50.3%
BEGIN GROSS 10002.0 GAL
BEGIN NET 10063.1 GAL
BEGIN LEVEL 59.806 IN
BEGIN TEMP 64.120 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 11/01/2005
END GROSS 10002.4 GAL
END NET 10063.9 GAL
END LEVEL 59.808 IN
END TEMP 64.235 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	64.136	19264.18
1:58	64.150	19264.06
2:58	64.164	19263.98
3:58	64.179	19264.19
4:58	64.193	19264.25
5:58	64.207	19264.20
6:58	64.222	19264.35
7:58	64.235	19264.31

SLOPE -0.003 GAL/HR
SLOPE LOW -0.005 GAL/HR
SLOPE HIGH -0.002 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-296-0631

11/01/2005 3:04

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 10/31/2005
LAST DELIVERY 9:01
LAST DELIVERY 09/26/2005
GROSS CAPACITY 36.9%
BEGIN GROSS 2311.0 GAL
BEGIN NET 2301.6 GAL
BEGIN LEVEL 37.665 IN
BEGIN TEMP 68.908 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.035 IN
END TIME 3:03
END DATE 11/01/2005
END GROSS 2310.8 GAL
END NET 2301.6 GAL
END LEVEL 37.664 IN
END TEMP 68.870 F
END WATER 0.1 GAL
END WATER 0.034 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	68.891	2301.68
1:58	68.876	2301.69
2:58	68.871	2301.72

SLOPE 0.010 GAL/HR
SLOPE LOW 0.002 GAL/HR
SLOPE HIGH 0.011 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-296-0631

10/31/2005 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 10002.0 GAL
NET 10063.1 GAL
PROD LEVEL 59.806 IN
GROSS CAPACITY 50.3%
ULLAGE 8949.0 GAL
TEMPERATURE 64.120 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 9720.5 GAL
NET 9201.2 GAL
PROD LEVEL 55.785 IN
GROSS CAPACITY 46.0%
ULLAGE 9810.5 GAL
TEMPERATURE 64.600 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 2310.9 GAL
NET 2301.6 GAL
PROD LEVEL 37.664 IN
GROSS CAPACITY 36.9%
ULLAGE 3636.7 GAL
TEMPERATURE 68.908 F
WATER LEVEL 0.035 IN
WATER VOLUME 0.1 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-296-0631

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

12/31/2005 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 11647.6 GAL
NET 11686.3 GAL
PROD LEVEL 67.132 IN
GROSS CAPACITY 58.1%
ULLAGE 7383.4 GAL
TEMPERATURE 52.691 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 12924.6 GAL
NET 12959.6 GAL
PROD LEVEL 73.190 IN
GROSS CAPACITY 64.5%
ULLAGE 6106.4 GAL
TEMPERATURE 54.039 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 4563.3 GAL
NET 4563.7 GAL
PROD LEVEL 64.981 IN
GROSS CAPACITY 72.9%
ULLAGE 1384.4 GAL
TEMPERATURE 59.913 F
WATER LEVEL 0.027 IN
WATER VOLUME 0.0 GAL

CONFIDENTIAL

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-9631

11/30/2005 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 5910.8 GAL
NET 5926.7 GAL
PROD LEVEL 39.990 IN
GROSS CAPACITY 29.5%
ULLAGE 13120.7 GAL
TEMPERATURE 54.067 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 2586.7 GAL
NET 2593.6 GAL
PROD LEVEL 22.232 IN
GROSS CAPACITY 12.9%
ULLAGE 16444.3 GAL
TEMPERATURE 54.180 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 1122.2 GAL
NET 1121.7 GAL
PROD LEVEL 22.336 IN
GROSS CAPACITY 17.9%
ULLAGE 4825.5 GAL
TEMPERATURE 60.969 F
WATER LEVEL 0.028 IN
WATER VOLUME 0.1 GAL

ROSS MARITIME
9030 NW ST 45, 5000 RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

03/01/2006

3:00

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GAL
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 02/28/2006
LAST DELIVERY 13:04
LAST DELIVERY 12/13/2005
GROSS CAPACITY 39.0%
BEGIN GROSS 2443.5 GAL
BEGIN NET 2452.0 GAL
BEGIN LEVEL 39.273 IN
BEGIN TEMP 52.309 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.019 IN
END TIME 3:00
END DATE 03/01/2006
END GROSS 2443.5 GAL
END NET 2452.0 GAL
END LEVEL 39.273 IN
END TEMP 52.294 F
END WATER 0.0 GAL
END WATER 0.019 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	52.306	2452.02
1:58	52.302	2452.04
2:58	52.297	2452.04

SLOPE 0.004 GAL/HR
SLOPE LOW 0.004 GAL/HR
SLOPE HIGH 0.005 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST 45, 5000 RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

02/28/2006

23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 14534.9 GAL
NET 14602.4 GAL
PROD LEVEL 0.000 IN
GROSS CAPACITY 72.6%
ULLAGE 4496.1 GAL
TEMPERATURE 49.768 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 15342.1 GAL
NET 15310.9 GAL
PROD LEVEL 0.000 IN
GROSS CAPACITY 70.1%
ULLAGE 5789.0 GAL
TEMPERATURE 50.048 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 2443.5 GAL
NET 2452.0 GAL
PROD LEVEL 39.273 IN
GROSS CAPACITY 39.0%
ULLAGE 3504.2 GAL
TEMPERATURE 52.309 F
WATER LEVEL 0.020 IN
WATER VOLUME 0.0 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

02/01/2006

3:09

LEAK TEST REPORT

TANK 3 6260.8 GAL
30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 01/31/2006
LAST DELIVERY 13:04
LAST DELIVERY 12/13/2005
GROSS CAPACITY 53.5%
BEGIN GROSS 3348.7 GAL
BEGIN NET 3356.3 GAL
BEGIN LEVEL 50.104 IN
BEGIN TEMP 55.010 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.023 IN
END TIME 3:09
END DATE 02/01/2006
END GROSS 3348.7 GAL
END NET 3356.3 GAL
END LEVEL 50.104 IN
END TEMP 54.993 F
END WATER 0.0 GAL
END WATER 0.023 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	55.006	3356.34
1:58	54.977	3356.39
2:58	54.996	3356.35

SLOPE 0.018 GAL/HR
SLOPE LOW 0.016 GAL/HR
SLOPE HIGH 0.019 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

02/01/2006

14:48

LEAK TEST REPORT

TANK 1 20032.7 GAL
DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 6:48
TEST STARTED 02/01/2006
LAST DELIVERY 4:58
LAST DELIVERY 02/01/2006
GROSS CAPACITY 64.6%
BEGIN GROSS 12934.7 GAL
BEGIN NET 12980.3 GAL
BEGIN LEVEL 73.239 IN
BEGIN TEMP 52.226 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 14:48
END DATE 02/01/2006
END GROSS 12934.8 GAL
END NET 12980.5 GAL
END LEVEL 73.239 IN
END TEMP 52.220 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:48	52.218	23861.02
8:47	52.214	23861.08
9:48	52.217	23861.11
10:48	52.221	23861.15
11:47	52.219	23861.07
12:48	52.219	23861.16
13:47	52.218	23861.08
14:48	52.220	23860.93

SLOPE 0.006 GAL/HR
SLOPE LOW 0.005 GAL/HR
SLOPE HIGH 0.007 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

01/31/2006

23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 8329.0 GAL
NET 8357.6 GAL
PROD LEVEL 51.604 IN
GROSS CAPACITY 41.6%
ULLAGE 10702.1 GAL
TEMPERATURE 52.414 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 5089.4 GAL
NET 5105.1 GAL
PROD LEVEL 35.877 IN
GROSS CAPACITY 25.4%
ULLAGE 13941.7 GAL
TEMPERATURE 53.166 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 3348.7 GAL
NET 3356.3 GAL
PROD LEVEL 50.103 IN
GROSS CAPACITY 53.5%
ULLAGE 2599.0 GAL
TEMPERATURE 55.010 F
WATER LEVEL 0.023 IN
WATER VOLUME 0.0 GAL

Top

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Bot

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46024.1

POSS PARTTIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

02/01/2006 14:48
LEAK TEST REPORT
TANK 2 20032.7 GAL
DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 02/01/2006 6:48
TEST STARTED 4:58
LAST DELIVERY 02/01/2006
LAST DELIVERY 54.1%
GROSS CAPACITY 10844.2 GAL
BEGIN GROSS 10880.6 GAL
BEGIN NET 63.365 IN
BEGIN LEVEL 52.612 F
BEGIN TEMP 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 02/01/2006 14:48
END DATE 10844.5 GAL
END GROSS 10880.6 GAL
END NET 63.366 IN
END LEVEL 52.663 F
END TEMP 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:48	52.608	23861.08
8:48	52.614	23861.20
9:48	52.610	23861.11
10:48	52.611	23861.19
11:48	52.626	23861.05
12:48	52.630	23861.04
13:48	52.640	23861.14
14:48	52.663	23861.20

SLOPE 0.006 GAL/HR
SLOPE LOW 0.005 GAL/HR
SLOPE HIGH 0.007 GAL/HR
TEST RESULT PASSED
SLOPE EQUATION CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2006 13:00

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2006
LAST DELIVERY 10:19
LAST DELIVERY 03/30/2006
GROSS CAPACITY 68.9%
BEGIN GROSS 4314.2 GAL
BEGIN NET 4313.3 GAL
BEGIN LEVEL 61.829 IN
BEGIN TEMP 60.494 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.014 IN
END TIME 3:00
END DATE 05/01/2006
END GROSS 4314.2 GAL
END NET 4313.2 GAL
END LEVEL 61.829 IN
END TEMP 60.503 F
END WATER 0.0 GAL
END WATER 0.014 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	60.497	4313.30
1:58	60.500	4313.33
2:58	60.502	4313.34

SLOPE	-0.000 GAL/HR	7
SLOPE LOW	-0.001 GAL/HR	5
SLOPE HIGH	0.001 GAL/HR	6
TEST RESULT	PASSED	18
SLOPE EQUALS CALCULATED		19
LEAK RATE		01
		12
		13

SLOPE	0.008 GAL/HR
SLOPE LOW	0.007 GAL/HR
SLOPE HIGH	0.009 GAL/HR
TEST RESULT	PASSED
SLOPE EQUALS CALCULATED	
LEAK RATE	

FOSS MARITIME
9030 NW ST HELENS RD
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PORTLAND OREGON 97231
1-503-286-0631

04/30/2006 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1	20032.7 GAL
MANIFOLD	MAN 1
PRODUCT	DIESEL
GROSS	9227.5 GAL
NET	9230.1 GAL
PROD LEVEL	55.817 IN
GROSS CAPACITY	46.1%
ULLAGE	9803.6 GAL
TEMPERATURE	59.382 F
WATER LEVEL	0.000 IN
WATER VOLUME	0.0 GAL

TANK 2

TANK NO. 2	20032.7 GAL
MANIFOLD	MAN 1
PRODUCT	DIESEL
GROSS	8452.7 GAL
NET	8453.5 GAL
PROD LEVEL	53.126 IN
GROSS CAPACITY	43.2%
ULLAGE	10378.4 GAL
TEMPERATURE	59.799 F
WATER LEVEL	0.000 IN
WATER VOLUME	0.0 GAL

TANK 3

TANK NO. 3	6260.8 GAL
PRODUCT	30 WT OIL
GROSS	4314.3 GAL
NET	4313.3 GAL
PROD LEVEL	61.829 IN
GROSS CAPACITY	68.9%
ULLAGE	1633.5 GAL
TEMPERATURE	60.494 F
WATER LEVEL	0.014 IN
WATER VOLUME	0.0 GAL

ROSS MARITIME
9030 NW ST. HELENS RD
P. O. BOX 93018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2006 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2006
LAST DELIVERY 1:29
LAST DELIVERY 04/28/2006
GROSS CAPACITY 46.1%
BEGIN GROSS 9227.5 GAL
BEGIN NET 9230.1 GAL
BEGIN LEVEL 55.817 IN
BEGIN TEMP 59.382 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 05/01/2006
END GROSS 9227.6 GAL
END NET 9230.2 GAL
END LEVEL 55.818 IN
END TEMP 59.363 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	59.380	17883.57
1:58	59.377	17883.65
2:58	59.374	17883.66
3:58	59.373	17883.98
4:58	59.369	17883.99
5:58	59.367	17884.01
6:58	59.365	17884.12
7:58	59.363	17884.13

SLOPE 0.088 GAL/HR
SLOPE LOW 0.087 GAL/HR
SLOPE HIGH 0.090 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2006 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 04/30/2006 23:59
LAST DELIVERY 1:29
LAST DELIVERY 04/28/2006
GROSS CAPACITY 43.2%
BEGIN GROSS 8652.8 GAL
BEGIN NET 8653.5 GAL
BEGIN LEVEL 53.126 IN
BEGIN TEMP 59.799 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN

END TIME 7:58
END DATE 05/01/2006
END GROSS 8653.1 GAL
END NET 8653.9 GAL
END LEVEL 53.127 IN
END TEMP 59.792 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	59.798	17883.57
1:58	59.798	17883.65
2:58	59.797	17883.66
3:58	59.795	17883.98
4:58	59.794	17883.99
5:58	59.793	17884.01
6:58	59.793	17884.12
7:58	59.792	17884.13

SLOPE 0.000 GAL/HR
SLOPE LOW 0.007 GAL/HR
SLOPE HIGH 0.000 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

END LEVEL 73.530 IN
 END TEMP 80.333 F
 END WATER 0.1 GAL
 END WATER 0.035 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	81.394	5151.26
1:58	81.174	5151.24
3:00	81.170	5151.25
3:58	80.957	5151.35
4:58	80.745	5151.40
5:58	80.541	5151.43
6:58	80.333	5151.56

SLOPE 0.056 GAL/HR
 SLOPE LOW 0.055 GAL/HR
 SLOPE HIGH 0.057 GAL/HR
 TEST RESULT PASSED
 SLOPE EQUALS CALCULATED
 LEAK RATE

FOSS MARITIME
 9030 NW ST HELENS RD
 P. O. BOX 83018
 PORTLAND OREGON 97231
 1-503-286-0631

03/31/2006

23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
 MANIFOLD MAN 1
 PRODUCT DIESEL
 GROSS 14229.6 GAL
 NET 14265.1 GAL
 PROD LEVEL 79.543 IN
 GROSS CAPACITY 71.0%
 ULLAGE 4801.4 GAL
 TEMPERATURE 54.510 F
 WATER LEVEL 0.000 IN
 WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
 MANIFOLD MAN 1
 PRODUCT DIESEL
 GROSS 14133.3 GAL
 NET 14163.1 GAL
 PROD LEVEL 79.066 IN
 GROSS CAPACITY 70.6%
 ULLAGE 4897.7 GAL
 TEMPERATURE 55.356 F
 WATER LEVEL 0.000 IN
 WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
 PRODUCT 30 WT OIL
 GROSS 5202.3 GAL
 NET 5151.0 GAL
 PROD LEVEL 73.568 IN
 GROSS CAPACITY 83.1%
 ULLAGE 745.4 GAL
 TEMPERATURE 81.619 F
 WATER LEVEL 0.036 IN
 WATER VOLUME 0.1 GAL

FOSS MARITIME
 9030 NW ST HELENS RD
 P. O. BOX 83018
 PORTLAND OREGON 97231
 1-503-286-0631

04/01/2006

7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL
 DIESEL

LEAK TEST 0.200 GPH
 LEAK THRESHOLD 0.100 GPH
 CONFIDENCE LEVEL 95.0%
 TEST STARTED 23:59
 TEST STARTED 03/31/2006
 LAST DELIVERY 21:02
 LAST DELIVERY 03/28/2006
 GROSS CAPACITY 71.0%
 BEGIN GROSS 14229.6 GAL
 BEGIN NET 14265.1 GAL
 BEGIN LEVEL 79.543 IN
 BEGIN TEMP 54.510 F

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

04/01/2006 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 03/31/2006
LAST DELIVERY 21:02
LAST DELIVERY 03/28/2006
GROSS CAPACITY 71.0%
BEGIN GROSS 14229.6 GAL
BEGIN NET 14265.1 GAL
BEGIN LEVEL 79.543 IN
BEGIN TEMP 54.510 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 04/01/2006
END GROSS 14229.6 GAL
END NET 14265.2 GAL
END LEVEL 79.543 IN
END TEMP 54.476 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	54.505	28428.31
1:58	54.500	28428.36
3:00	54.500	28428.39
3:58	54.494	28428.38
4:58	54.489	28428.53
5:58	54.484	28428.44
6:58	54.480	28428.45
7:58	54.476	28428.43

SLOPE 0.009 GAL/HR
SLOPE LOW 0.008 GAL/HR
SLOPE HIGH 0.010 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD.
P. O. BOX-83018
PORTLAND OREGON 97231
1-503-286-0631

04/01/2006 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 03/31/2006
LAST DELIVERY 21:02
LAST DELIVERY 03/28/2006
GROSS CAPACITY 70.6%
BEGIN GROSS 14133.3 GAL
BEGIN NET 14163.1 GAL
BEGIN LEVEL 79.066 IN
BEGIN TEMP 55.356 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:59
END DATE 04/01/2006
END GROSS 14133.5 GAL
END NET 14163.2 GAL
END LEVEL 79.067 IN
END TEMP 55.378 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	55.359	28428.31
1:58	55.361	28428.36
3:00	55.361	28428.39
3:58	55.365	28428.38
4:58	55.367	28428.53
5:58	55.371	28428.44
6:58	55.374	28428.45
7:58	55.378	28428.43

SLOPE 0.009 GAL/HR
SLOPE LOW 0.000 GAL/HR
SLOPE HIGH 0.010 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

04/01/2006 6:59

LEAK TEST REPORT

TANK 3 6260.8 GAL.

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 03/31/2006 10:19
LAST DELIVERY 03/30/2006
LAST DELIVERY 03/30/2006
GROSS CAPACITY 83.1%
BEGIN GROSS 5202.3 GAL
BEGIN NET 5151.1 GAL
BEGIN LEVEL 73.548 IN
BEGIN TEMP 81.620 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.036 IN
END TIME 6:58
END DATE 04/01/2006
END GROSS 5199.6 GAL
END NET 5151.5 GAL
END LEVEL 73.530 IN
END TEMP 80.333 F
END WATER 0.1 GAL
END WATER 0.035 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	81.394	5151.25
1:58	81.174	5151.24
3:00	81.170	5151.25
3:58	80.957	5151.35
4:58	80.745	5151.40
5:58	80.541	5151.43
6:58	80.333	5151.56

SLOPE 0.056 GAL/HR
SLOPE LOW 0.055 GAL/HR
SLOPE HIGH 0.057 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

04/30/2006 23:59

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2006 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2006
LAST DELIVERY 1:29
LAST DELIVERY 04/29/2006
GROSS CAPACITY 46.1%
BEGIN GROSS 9227.5 GAL
BEGIN NET 9230.1 GAL
BEGIN LEVEL 55.817 IN
BEGIN TEMP 59.382 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 05/01/2006
END GROSS 9227.6 GAL
END NET 9230.2 GAL
END LEVEL 55.818 IN
END TEMP 59.363 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	59.380	17883.57
1:58	59.377	17883.65
2:58	59.374	17883.66
3:58	59.373	17883.98
4:58	59.369	17883.99
5:58	59.367	17884.01
6:58	59.365	17884.12
7:58	59.363	17884.13

SLOPE 0.088 GAL/HR
SLOPE LOW 0.087 GAL/HR
SLOPE HIGH 0.090 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 9227.5 GAL
NET 9230.1 GAL
PROD LEVEL 55.817 IN
GROSS CAPACITY 46.1%
ULLAGE 9803.6 GAL
TEMPERATURE 59.382 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 8652.7 GAL
NET 8653.5 GAL
PROD LEVEL 53.126 IN
GROSS CAPACITY 43.2%
ULLAGE 10378.4 GAL
TEMPERATURE 59.799 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 4314.3 GAL
NET 4313.3 GAL
PROD LEVEL 61.829 IN
GROSS CAPACITY 68.9%
ULLAGE 1633.5 GAL
TEMPERATURE 60.494 F
WATER LEVEL 0.014 IN
WATER VOLUME 0.0 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/01/2006

7:59

05/01/2006 3:08

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE-LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2006
LAST DELIVERY 10:19
LAST DELIVERY 03/30/2006
GROSS CAPACITY 68.9%
BEGIN GROSS 4314.2 GAL
BEGIN NET 4313.3 GAL
BEGIN LEVEL 61.829 IN
BEGIN TEMP 60.494 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.014 IN
END TIME 3:08
END DATE 05/01/2006
END GROSS 4314.2 GAL
END NET 4313.2 GAL
END LEVEL 61.829 IN
END TEMP 60.503 F
END WATER 0.0 GAL
END WATER 0.014 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	60.497	4313.30
1:58	60.500	4313.33
2:58	60.502	4313.34

SLOPE -0.000 GAL/HR
SLOPE LOW -0.001 GAL/HR
SLOPE HIGH 0.001 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 04/30/2006
LAST DELIVERY 1:29
LAST DELIVERY 04/29/2006
GROSS CAPACITY 43.2%
BEGIN GROSS 8652.8 GAL
BEGIN NET 8653.5 GAL
BEGIN LEVEL 53.126 IN
BEGIN TEMP 59.799 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 05/01/2006
END GROSS 8653.1 GAL
END NET 8653.9 GAL
END LEVEL 53.127 IN
END TEMP 59.792 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	59.798	17883.57
1:58	59.798	17883.65
2:58	59.797	17883.66
3:58	59.795	17883.98
4:58	59.794	17883.99
5:58	59.793	17884.01
6:58	59.793	17884.12
7:58	59.792	17884.13

SLOPE 0.008 GAL/HR
SLOPE LOW 0.007 GAL/HR
SLOPE HIGH 0.000 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

05/31/2006 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 8970.7 GAL
NET 8941.4 GAL
PROD LEVEL 54.616 IN
GROSS CAPACITY 44.8%
ULLAGE 10060.4 GAL
TEMPERATURE 67.178 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 9670.7 GAL
NET 9638.7 GAL
PROD LEVEL 57.887 IN
GROSS CAPACITY 48.3%
ULLAGE 9360.3 GAL
TEMPERATURE 67.290 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 2981.8 GAL
NET 2974.9 GAL
PROD LEVEL 45.729 IN
GROSS CAPACITY 47.6%
ULLAGE 2965.9 GAL
TEMPERATURE 65.094 F
WATER LEVEL 0.022 IN
WATER VOLUME 0.0 GAL

06/01/2006 7:58

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 05/31/2006
LAST DELIVERY 7:29
LAST DELIVERY 05/26/2006
GROSS CAPACITY 44.8%
BEGIN GROSS 8970.7 GAL
BEGIN NET 8941.4 GAL
BEGIN LEVEL 54.616 IN
BEGIN TEMP 67.128 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 06/01/2006
END GROSS 8971.6 GAL
END NET 8942.6 GAL
END LEVEL 54.620 IN
END TEMP 67.099 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:50	67.167	18572.70
1:50	67.157	18575.84
2:50	67.147	18576.94
3:50	67.137	18582.42
4:50	67.127	18574.82
5:50	67.118	18576.88
6:50	67.109	18575.83
7:50	67.099	18581.62

SLOPE -0.008 GAL/HR
SLOPE LOW -0.043 GAL/HR
SLOPE HIGH 0.028 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P.O. BOX 83018

ROSS MARITIME
9630 NW ST HELENA RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-9631

06/01/2006 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPM

LEAK THRESHOLD 0.100 GPM

CONFIDENCE LEVEL 95.0%

TEST STARTED 23:59

TEST STARTED 05/31/2006

LAST DELIVERY 7:29

LAST DELIVERY 05/26/2006

GROSS CAPACITY 48.3%

BEGIN GROSS 9670.7 GAL

BEGIN NET 9638.7 GAL

BEGIN LEVEL 57.887 IN

BEGIN TEMP 67.290 F

BEGIN WATER 0.0 GAL

BEGIN WATER 0.000 IN

END TIME 7:58

END DATE 06/01/2006

END GROSS 9670.7 GAL

END NET 9639.0 GAL

END LEVEL 57.887 IN

END TEMP 67.217 F

END WATER 0.0 GAL

END WATER 0.000 IN

HOURLY DATA

TIME	DEG F.	GAL
0:58	67.280	18572.70
1:58	67.271	18575.84
2:58	67.261	18576.94
3:58	67.252	18582.42
4:58	67.243	18574.82
5:58	67.234	18576.88
6:58	67.226	18575.83
7:58	67.217	18581.62

SLOPE -0.008 GAL/HR
SLOPE LOW -0.043 GAL/HR
SLOPE HIGH 0.028 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
903A NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

06/01/2006 3:08

LEAK TEST REPORT

TANK 3 6260.8-GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 05/31/2006
LAST DELIVERY 18:19
LAST DELIVERY 03/30/2006
GROSS CAPACITY 47.6%
BEGIN GROSS 2981.8 GAL
BEGIN NET 2974.9 GAL
BEGIN LEVEL 45.729 IN
BEGIN TEMP 65.094 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.022 IN
END TIME 3:08
END DATE 06/01/2006
END GROSS 2981.8 GAL
END NET 2974.9 GAL
END LEVEL 45.729 IN
END TEMP 65.101 F
END WATER 0.0 GAL
END WATER 0.022 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	65.096	2974.98
1:58	65.098	2974.89
2:58	65.101	2974.92

SLOPE -0.003 GAL/HR
SLOPE LOW -0.004 GAL/HR
SLOPE HIGH -0.002 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
903A NW ST HELENS RD
P. O. BOX 83018

N
F
AL
IN
58
2006
GAL
0 GAL
0.217 F
0.0 GAL
0.000 IN

GAL
0 18572.70
71 18575.84
161 18576.94
252 18582.42
243 18574.82
234 18576.88
226 18575.83
217 18581.62

-0.008 GAL/HR
W -0.043 GAL/HR
IGH 0.028 GAL/HR
SULT PASSED
EQUALS CALCULATED
RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

07/05/2006 12:30

LEAK TEST REPORT

TANK 3 6260.8 GAL
30 WT OIL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 9:30
TEST STARTED 07/05/2006
LAST DELIVERY 10:19
LAST DELIVERY 03/30/2006
GROSS CAPACITY 29.7%
BEGIN GROSS 1862.4 GAL
BEGIN NET 1853.0 GAL
BEGIN LEVEL 32.116 IN
BEGIN TEMP 71.063 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.021 IN
END TIME 12:30
END DATE 07/05/2006
END GROSS 1862.5 GAL
END NET 1853.1 GAL
END LEVEL 32.117 IN
END TEMP 71.082 F
END WATER 0.0 GAL
END WATER 0.022 IN

HOURLY DATA

TIME	DEG F	GAL
10:30	71.069	1853.22
11:30	71.076	1853.23
12:30	71.082	1853.17

SLOPE 0.039 GAL/HR
SLOPE LOW 0.037 GAL/HR
SLOPE HIGH 0.041 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

07/01/2006 3:00

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 06/30/2006
LAST DELIVERY 10:19
LAST DELIVERY 03/30/2006
GROSS CAPACITY 35.4%
BEGIN GROSS 2214.6 GAL
BEGIN NET 2204.8 GAL
BEGIN LEVEL 36.487 IN
BEGIN TEMP 69.765 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.021 IN
END TIME 3:03
END DATE 07/01/2006
END GROSS 2214.6 GAL
END NET 2204.8 GAL
END LEVEL 36.487 IN
END TEMP 69.777 F
END WATER 0.0 GAL
END WATER 0.021 IN

HOURLY DATA

TIME	DEG F	GAL
0:50	69.769	2204.82
1:50	69.773	2204.80
2:50	69.777	2204.82

SLOPE 0.006 GAL/HR
SLOPE LOW 0.005 GAL/HR
SLOPE HIGH 0.007 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

07/01/2006

18:06

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-8631

07/05/2006 17:30

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 9:30
TEST STARTED 07/05/2006
LAST DELIVERY 18:34
LAST DELIVERY 07/03/2006
GROSS CAPACITY 50722
BEGIN GROSS 10060.6 GAL
BEGIN NET 9991.5 GAL
BEGIN LEVEL 59.706 IN
BEGIN TEMP 75.088 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 17:30
END DATE 07/05/2006
END GROSS 10059.7 GAL
END NET 9991.5 GAL
END LEVEL 59.702 IN
END TEMP 74.897 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
10:30	75.061	19284.57
11:30	75.037	19285.43
12:30	75.011	19284.40
13:30	74.985	19284.42
14:30	74.961	19284.56
15:30	74.938	19284.23
16:30	74.916	19284.29
17:30	74.897	19284.48

SLOPE -0.013 GAL/HR
SLOPE LOW -0.018 GAL/HR
SLOPE HIGH -0.008 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

07/01/2006 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 06/30/2006
LAST DELIVERY 18:31
LAST DELIVERY 06/28/2006
GROSS CAPACITY 58.2%
BEGIN GROSS 11668.6 GAL
BEGIN NET 11607.8 GAL
BEGIN LEVEL 67.230 IN
BEGIN TEMP 71.455 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:59
END DATE 07/01/2006
END GROSS 9076.0 GAL
END NET 9028.0 GAL
END LEVEL 55.109 IN
END TEMP 71.630 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:50	71.646	14698.32
1:50	71.690	14646.94
2:50	71.697	14654.02
3:50	71.685	14650.85
4:50	71.669	14652.16
5:50	71.657	14655.21
6:50	71.644	14654.07
7:50	71.630	14653.02

SLOPE -404.406 GAL/HR
SLOPE LO -419.448 GAL/HR
SLOPE HI -389.365 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME

BEGIN TEMP 71.984 F
END TIME 17:59
END DATE 07/01/2006
END GROSS 25199.3 GAL
END NET 25065.5 GAL
END ULLAGE 12862.8 GAL
END LEVEL 66.962 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 71.587 F
GROSS DEL 10481.8 GAL
NET DEL 10427.0 GAL

PORTLAND OREGON 97231
1-503-286-0631

07/05/2006

17:31

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 07/05/2006 9:30
LAST DELIVERY 18:34
LAST DELIVERY 07/03/2006
GROSS CAPACITY 46.7%
BEGIN GROSS 9354.0 GAL
BEGIN NET 9292.9 GAL
BEGIN LEVEL 56.408 IN
BEGIN TEMP 74.360 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 17:30
END DATE 07/05/2006
END GROSS 9353.5 GAL
END NET 9293.0 GAL
END LEVEL 56.406 IN
END TEMP 74.208 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
10:30	74.339	19284.57
11:30	74.319	19285.43
12:30	74.299	19284.40
13:30	74.280	19284.42
14:30	74.262	19284.56
15:30	74.243	19284.23
16:30	74.225	19284.29
17:30	74.208	19284.48

SLOPE -0.013 GAL/HR
SLOPE LOW -0.018 GAL/HR
SLOPE HIGH -0.008 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

PORTLAND OREGON 97231
1-503-286-0631

07/01/2006

7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 06/30/2006
LAST DELIVERY 18:31
LAST DELIVERY 06/28/2006
GROSS CAPACITY 47.8%
BEGIN GROSS 9576.4 GAL
BEGIN NET 9525.0 GAL
BEGIN LEVEL 57.447 IN
BEGIN TEMP 71.799 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 07/01/2006
END GROSS 5655.7 GAL
END NET 5625.0 GAL
END LEVEL 38.725 IN
END TEMP 71.915 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	71.940	16888.32
1:58	71.981	14646.94
2:58	71.995	14654.02
3:58	71.991	14650.85
4:58	71.977	14652.10
5:58	71.958	14655.21
6:58	71.936	14654.07
7:58	71.915	14653.02

SLOPE -404.406 GAL/HR
SLOPE LO -419.448 GAL/HR
SLOPE HI -389.365 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST. HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

07/01/2006 18:06

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 1 (MAN 1)

BEGIN TIME 17:34
BEGIN DATE 07/01/2006
BEGIN GROSS 14717.5 GAL
BEGIN NET 14638.5 GAL
BEGIN ULLAGE 23344.6 GAL
BEGIN LEVEL 55.042 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 71.676 F
END TIME 17:59
END DATE 07/01/2006
END GROSS 25199.3 GAL
END NET 25065.5 GAL
END ULLAGE 12862.8 GAL
END LFUEL 76.393 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 71.736 F
GROSS DEL 10481.8 GAL
NET DEL 10427.0 GAL

FOSS MARITIME
9030 NW ST. HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

07/01/2006 18:07

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 2 (MAN 2)

BEGIN TIME 17:34
BEGIN DATE 07/01/2006
BEGIN GROSS 14717.5 GAL
BEGIN NET 14638.5 GAL
BEGIN ULLAGE 23344.6 GAL
BEGIN LEVEL 38.726 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 71.984 F
END TIME 17:59
END DATE 07/01/2006
END GROSS 25199.3 GAL
END NET 25065.5 GAL
END ULLAGE 12862.8 GAL
END LEVEL 66.962 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 71.587 F
GROSS DEL 10481.8 GAL
NET DEL 10427.0 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND, OREGON 97231
1-503-286-0631

08/01/2006 7:58

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 07/31/2006
LAST DELIVERY 19:34
LAST DELIVERY 07/31/2006
GROSS CAPACITY 58.7%
BEGIN GROSS 11754.7 GAL
BEGIN NET 11695.7 GAL
BEGIN LEVEL 67.636 IN
BEGIN TEMP 71.038 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 08/01/2006
END GROSS 11766.3 GAL
END NET 11705.6 GAL
END LEVEL 67.690 IN
END TEMP 71.347 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	71.078	23478.05
1:58	71.146	23474.04
2:58	71.182	23474.14
3:58	71.232	23475.21
4:58	71.271	23476.01
5:58	71.292	23475.97
6:58	71.317	23473.87
7:58	71.347	23479.21

SLOPE 0.267 GAL/HR
SLOPE LOW 0.200 GAL/HR
SLOPE HIGH 0.334 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND, OREGON 97231
1-503-286-0631

08/01/2006 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND, OREGON 97231
1-503-286-0631

08/01/2006 2:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 07/31/2006
LAST DELIVERY 18:19
LAST DELIVERY 03/30/2006
GROSS CAPACITY 8.6%
BEGIN GROSS 540.1 GAL
BEGIN NET 536.2 GAL
BEGIN LEVEL 13.426 IN
BEGIN TEMP 75.725 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.030 IN
END TIME 2:08
END DATE 08/01/2006
END GROSS 540.1 GAL
END NET 536.2 GAL
END LEVEL 13.427 IN
END TEMP 75.707 F
END WATER 0.1 GAL
END WATER 0.030 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	75.717	536.30
1:58	75.708	536.30

SLOPE 0.006 GAL/HR
SLOPE LOW 0.005 GAL/HR
SLOPE HIGH 0.007 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND, OREGON 97231
1-503-286-0631

07/31/2006 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 11767.1 GAL
NET 11708.0 GAL
PROD LEVEL 67.694 IN
GROSS CAPACITY 58.7%
ULLAGE 7263.9 GAL
TEMPERATURE 71.039 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 11832.9 GAL
NET 11772.4 GAL
PROD LEVEL 68.004 IN
GROSS CAPACITY 59.1%
ULLAGE 7198.2 GAL
TEMPERATURE 71.233 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 540.1 GAL
NET 536.2 GAL
PROD LEVEL 13.427 IN
GROSS CAPACITY 8.6%
ULLAGE 5407.6 GAL
TEMPERATURE 75.725 F
WATER LEVEL 0.030 IN
WATER VOLUME 0.1 GAL

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

08/01/2006

LEAK TEST REPORT

TANK 2

DIESEL

20032.7 GAL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 07/31/2006 19:34
TEST DELIVERY 07/31/2006 59.1%
LAST DELIVERY 07/31/2006 59.1%
GROSS CAPACITY 11832.3 GAL
BEGIN GROSS 11772.3 GAL
BEGIN NET 68.000 IN
BEGIN LEVEL 71.233 F
BEGIN TEMP 0.0 GAL
BEGIN WATER 0.000 IN
BEGIN WATER 7:58
END TIME 08/01/2006
END DATE 11835.2 GAL
END GROSS 11773.5 GAL
END NET 68.015 IN
END LEVEL 71.474 F
END TEMP 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	71.267	23486.51
1:58	71.303	23467.89
2:58	71.333	23473.21
3:58	71.364	23475.13
4:58	71.395	23474.05
5:58	71.421	23467.78
6:58	71.449	23477.01
7:58	71.474	23473.84

SLOPE LOW 0.266 GAL/HR
SLOPE HIGH 0.199 GAL/HR
SLOPE RESULT 0.334 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/07/2006 21:10

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 13:10
TEST STARTED 09/07/2006
LAST DELIVERY 20:10
LAST DELIVERY 09/01/2006
GROSS CAPACITY 44.6%
BEGIN GROSS 8942.1 GAL
BEGIN NET 8878.9 GAL
BEGIN LEVEL 54.482 IN
BEGIN TEMP 75.522 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 21:10
END DATE 09/07/2006
END GROSS 8943.2 GAL
END NET 8880.2 GAL
END LEVEL 54.488 IN
END TEMP 75.482 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
14:10	75.517	16051.80
15:10	75.512	16060.27
16:10	75.507	16057.20
17:10	75.502	16053.19
18:10	75.497	16058.77
19:10	75.492	16059.76
20:10	75.487	16053.72
21:10	75.482	16056.86

SLOPE -0.486 GAL/HR
SLOPE LOW -0.540 GAL/HR
SLOPE HIGH -0.431 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

09/07/2006 21:11

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 13:11
TEST STARTED 09/07/2006
LAST DELIVERY 20:10
LAST DELIVERY 09/01/2006
GROSS CAPACITY 36.1%
BEGIN GROSS 7227.5 GAL
BEGIN NET 7176.0 GAL
BEGIN LEVEL 46.382 IN
BEGIN TEMP 75.663 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 21:10
END DATE 09/07/2006
END GROSS 7227.9 GAL
END NET 7176.6 GAL
END LEVEL 46.384 IN
END TEMP 75.613 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
14:10	75.656	16058.12
15:10	75.650	16063.32
16:10	75.644	16051.98
17:10	75.637	16055.31
18:10	75.631	16055.52
19:10	75.625	16058.86
20:10	75.619	16053.63
21:10	75.613	16057.90

SLOPE -0.487 GAL/HR
SLOPE LOW -0.541 GAL/HR
SLOPE HIGH -0.432 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/07/2006 7:54

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 4:44
TEST STARTED 09/07/2006
LAST DELIVERY 7:51
LAST DELIVERY 08/01/2006
GROSS CAPACITY 62.8%
BEGIN GROSS 3932.4 GAL
BEGIN NET 3902.4 GAL
BEGIN LEVEL 57.125 IN
BEGIN TEMP 76.742 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.033 IN
END TIME 7:54
END DATE 09/07/2006
END GROSS 3932.5 GAL
END NET 3902.5 GAL
END LEVEL 57.126 IN
END TEMP 76.737 F
END WATER 0.1 GAL
END WATER 0.034 IN

HOURLY DATA

TIME	DEG F	GAL
5:44	76.741	3902.52
6:44	76.739	3902.55
7:44	76.737	3902.55

SLOPE 0.008 GAL/HR
SLOPE LOW 0.007 GAL/HR
SLOPE HIGH 0.009 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83010
PORTLAND OREGON 97231
1-503-286-0631

09/07/2006 12:44

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95 %
TEST STARTED 4:44
TEST STARTED 09/07/2006
LAST DELIVERY 20:10
LAST DELIVERY 09/01/2006
GROSS CAPACITY 36.1%
BEGIN GROSS 7228.6 GAL
BEGIN NET 7176.9 GAL
BEGIN LEVEL 46.387 IN
BEGIN TEMP 75.726 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 12:44
END DATE 09/07/2006
END GROSS 7227.4 GAL
END NET 7175.8 GAL
END LEVEL 46.381 IN
END TEMP 75.666 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
5:44	75.719	16067.91
6:44	75.710	16060.55
7:44	75.703	16063.66
8:44	75.695	16058.29
9:44	75.688	16060.57
10:44	75.680	16059.71
11:44	75.673	16064.90
12:44	75.666	16054.53

SLOPE -0.226 GAL/HR
SLOPE LOW -0.286 GAL/HR
SLOPE HIGH -0.165 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83010
PORTLAND OREGON 97231
1-503-286-0631

09/07/2006 12:44

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 4:44
TEST STARTED 09/07/2006
LAST DELIVERY 20:10
LAST DELIVERY 09/01/2006
GROSS CAPACITY 44.7%
BEGIN GROSS 8954.3 GAL
BEGIN NET 8890.8 GAL
BEGIN LEVEL 54.540 IN
BEGIN TEMP 75.578 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 12:44
END DATE 09/07/2006
END GROSS 8953.4 GAL
END NET 8890.1 GAL
END LEVEL 54.535 IN
END TEMP 75.525 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
5:44	75.571	16058.58
6:44	75.564	16062.68
7:44	75.557	16061.52
8:44	75.551	16063.47
9:44	75.544	16067.94
10:44	75.537	16059.61
11:44	75.531	16062.89
12:44	75.525	16066.06

SLOPE -0.225 GAL/HR
SLOPE LOW -0.286 GAL/HR
SLOPE HIGH -0.164 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/15/2006 10:30

ALARM REPORT

09/15/2006 10:30
HIGH PRODUCT LIMIT
TANK NO: 1

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/15/2006 10:45

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 1 (MAN 1)

BEGIN TIME 9:06
BEGIN DATE 09/15/2006
BEGIN GROSS 24274.9 GAL
BEGIN NET 24136.1 GAL
BEGIN ULLAGE 13790.6 GAL
BEGIN LEVEL 71.081 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 72.184 F
END TIME 10:41
END DATE 09/15/2006
END GROSS 34311.3 GAL
END NET 34121.8 GAL
END ULLAGE 3750.8 GAL
END LEVEL 100.014 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 72.134 F
GROSS DEL 10066.4 GAL
NET DEL 10011.6 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/14/2006 11:09

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 1 (MAN 1)

BEGIN TIME 10:39
BEGIN DATE 09/14/2006
BEGIN GROSS 15836.1 GAL
BEGIN NET 15749.5 GAL
BEGIN ULLAGE 22226.0 GAL
BEGIN LEVEL 55.415 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 72.046 F
END TIME 11:03
END DATE 09/14/2006
END GROSS 26146.5 GAL
END NET 26010.3 GAL
END ULLAGE 11915.6 GAL
END LEVEL 81.901 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 71.420 F

GROSS DEL 10310.4 GAL
NET DEL 10260.8 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/14/2006 11:09

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 2 (MAN 2)

BEGIN TIME 10:39
BEGIN DATE 09/14/2006
BEGIN GROSS 15836.1 GAL
BEGIN NET 15749.5 GAL
BEGIN ULLAGE 22226.0 GAL
BEGIN LEVEL 43.819 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 71.922 F
END TIME 11:03
END DATE 09/14/2006
END GROSS 26146.5 GAL
END NET 26010.3 GAL
END ULLAGE 11915.6 GAL
END LEVEL 66.178 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 71.430 F
GROSS DEL 10310.4 GAL
NET DEL 10260.8 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/15/2006 9:37

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 1 (MAN 1)

BEGIN TIME 9:06
BEGIN DATE 09/15/2006
BEGIN GROSS 13774.9 GAL
BEGIN NET 13700.5 GAL
BEGIN ULLAGE 24287.2 GAL
BEGIN LEVEL 46.624 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 71.936 F
END TIME 9:29
END DATE 09/15/2006
END GROSS 24271.5 GAL
END NET 24136.1 GAL
END ULLAGE 13790.6 GAL
END LEVEL 71.209 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 72.248 F
GROSS DEL 10496.6 GAL
NET DEL 10435.5 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

09/15/2006 9:37

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 2 (MAN 2)

BEGIN TIME 9:06
BEGIN DATE 09/15/2006
BEGIN GROSS 13774.9 GAL
BEGIN NET 13700.5 GAL
BEGIN ULLAGE 24287.2 GAL
BEGIN LEVEL 42.859 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 71.801 F
END TIME 9:29
END DATE 09/15/2006
END GROSS 24271.5 GAL
END NET 24136.1 GAL
END ULLAGE 13790.6 GAL
END LEVEL 67.669 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 72.286 F
GROSS DEL 10496.6 GAL
NET DEL 10435.5 GAL

FOSS MARITIME
9030 NW ST HELENS RD
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PORTLAND OREGON 97231
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09/15/2006 10:45

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 2 (MAN 2)

BEGIN TIME 10:14
BEGIN DATE 09/15/2006
BEGIN GROSS 24244.9 GAL
BEGIN NET 24110.1 GAL
BEGIN ULLAGE 13817.2 GAL
BEGIN LEVEL 67.671 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 72.249 F
END TIME 10:41
END DATE 09/15/2006
END GROSS 34311.3 GAL
END NET 34121.8 GAL
END ULLAGE 3750.8 GAL
END LEVEL 90.454 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 72.143 F
GROSS DEL 10066.4 GAL
NET DEL 10011.6 GAL

FOSS MARITIME
9830 NW ST HELENS RD
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PORTLAND OREGON 97231
1-503-286-0631

09/06/2006 7:50

LEAK TEST REPORT

TANK 3 6268.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 4:40
TEST STARTED 09/06/2006
LAST DELIVERY 7:51
LAST DELIVERY 08/01/2006
GROSS CAPACITY 62.8%
BEGIN GROSS 3932.4 GAL
BEGIN NET 3902.4 GAL
BEGIN LEVEL 57.125 IN
BEGIN TEMP 76.781 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.034 IN
END TIME 7:50
END DATE 09/06/2006
END GROSS 3932.5 GAL
END NET 3902.4 GAL
END LEVEL 57.126 IN
END TEMP 76.775 F
END WATER 0.1 GAL
END WATER 0.034 IN

HOURLY DATA

TIME	DEG F	GAL
5:40	76.779	3902.43
6:40	76.777	3902.49
7:40	76.776	3902.49

SLOPE -0.018 GAL/HR
SLOPE LOW 0.017 GAL/HR
SLOPE HIGH 0.019 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9830 NW ST HELENS RD
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PORTLAND OREGON 97231
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09/06/2006 12:40

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 4:40
TEST STARTED 09/06/2006
LAST DELIVERY 20:10
LAST DELIVERY 09/01/2006
GROSS CAPACITY 62.1%
BEGIN GROSS 12440.3 GAL
BEGIN NET 12353.3 GAL
BEGIN LEVEL 70.879 IN
BEGIN TEMP 75.369 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 12:40
END DATE 09/06/2006
END GROSS 9016.9 GAL
END NET 8952.4 GAL
END LEVEL 54.832 IN
END TEMP 75.708 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
5:40	75.367	22611.97
6:40	75.619	18970.94
7:40	75.616	18971.99
8:40	75.607	18981.86
9:40	75.598	18973.60
10:40	75.589	18980.44
11:40	75.582	18992.93
12:40	75.708	16048.58

SLOPE -553.219 GAL/HR
SLOPE LO -564.986 GAL/HR
SLOPE HI -541.452 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

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09/06/2006 12:41

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 4:40
TEST STARTED 09/06/2006
LAST DELIVERY 20:10
LAST DELIVERY 09/01/2006
GROSS CAPACITY 51.6%
BEGIN GROSS 10331.4 GAL
BEGIN NET 10257.8 GAL
BEGIN LEVEL 60.970 IN
BEGIN TEMP 75.657 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 12:40
END DATE 09/06/2006
END GROSS 7147.9 GAL
END NET 7096.2 GAL
END LEVEL 46.000 IN
END TEMP 75.881 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
5:40	75.653	22611.97
6:40	75.815	18970.94
7:40	75.826	18971.99
8:40	75.824	18981.86
9:40	75.817	18973.60
10:40	75.808	18980.44
11:40	75.798	18992.93
12:40	75.881	16048.58

SLOPE -553.219 GAL/HR
SLOPE LO -564.986 GAL/HR
SLOPE HI -541.452 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

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09/02/2006

14:35

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 11:25
TEST STARTED 09/02/2006
LAST DELIVERY 7:51
LAST DELIVERY 08/01/2006
GROSS CAPACITY 65.2%
BEGIN GROSS 4084.2 GAL
BEGIN NET 4052.6 GAL
BEGIN LEVEL 58.981 IN
BEGIN TEMP 77.004 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.034 IN
END TIME 14:34
END DATE 09/02/2006
END GROSS 4084.0 GAL
END NET 4052.4 GAL
END LEVEL 58.978 IN
END TEMP 76.992 F
END WATER 0.1 GAL
END WATER 0.034 IN

HOURLY DATA

TIME	DEG F	GAL
12:24	77.000	4052.53
13:24	76.996	4052.48
14:24	76.993	4052.48

SLOPE -0.067 GAL/HR
SLOPE LOW -0.069 GAL/HR
SLOPE HIGH -0.065 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
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PORTLAND OREGON 97231
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09/02/2006

19:25

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 11:25
TEST STARTED 09/02/2006
LAST DELIVERY 20:10
LAST DELIVERY 09/01/2006
GROSS CAPACITY 83.8%
BEGIN GROSS 16796.8 GAL
BEGIN NET 16678.0 GAL
BEGIN LEVEL 93.000 IN
BEGIN TEMP 75.533 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 19:24
END DATE 09/02/2006
END GROSS 16797.3 GAL
END NET 16678.4 GAL
END LEVEL 93.002 IN
END TEMP 75.549 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
12:24	75.535	33714.24
13:24	75.537	33701.70
14:24	75.540	33700.86
15:24	75.542	33700.88
16:24	75.544	33700.11
17:24	75.546	33700.29
18:24	75.547	33691.43
19:24	75.549	33700.12

SLOPE -1.265 GAL/HR
SLOPE LOW -1.324 GAL/HR
SLOPE HIGH -1.206 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
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09/02/2006

19:25

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 11:25
TEST STARTED 09/02/2006
LAST DELIVERY 20:10
LAST DELIVERY 09/01/2006
GROSS CAPACITY 85.6%
BEGIN GROSS 17146.6 GAL
BEGIN NET 17026.9 GAL
BEGIN LEVEL 95.003 IN
BEGIN TEMP 75.337 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 19:24
END DATE 09/02/2006
END GROSS 17149.6 GAL
END NET 17029.7 GAL
END LEVEL 95.020 IN
END TEMP 75.362 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
12:24	75.340	33714.24
13:24	75.344	33701.70
14:24	75.347	33700.86
15:24	75.351	33700.88
16:24	75.354	33700.11
17:24	75.356	33700.29
18:24	75.358	33691.43
19:24	75.362	33700.12

SLOPE -1.265 GAL/HR
SLOPE LOW -1.324 GAL/HR
SLOPE HIGH -1.206 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

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08/31/2006 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 7075.7 GAL
NET 7025.6 GAL
PROD LEVEL 45.654 IN
GROSS CAPACITY 35.3%
ULLAGE 11955.4 GAL
TEMPERATURE 75.543 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 6832.9 GAL
NET 6782.6 GAL
PROD LEVEL 44.487 IN
GROSS CAPACITY 34.1%
ULLAGE 12198.1 GAL
TEMPERATURE 76.167 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 4084.4 GAL
NET 4052.6 GAL
PROD LEVEL 58.983 IN
GROSS CAPACITY 65.2%
ULLAGE 1863.3 GAL
TEMPERATURE 77.111 F
WATER LEVEL 0.033 IN
WATER VOLUME 0.1 GAL

FOSS MARITIME
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09/01/2006 20:41

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK-1 (MAN 1)

BEGIN TIME 20:10
BEGIN DATE 09/01/2006
BEGIN GROSS 24005.9 GAL
BEGIN NET 23838.3 GAL
BEGIN ULLAGE 14056.2 GAL
BEGIN LEVEL 71.292 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 75.163 F
END TIME 20:27
END DATE 09/01/2006
END GROSS 33967.7 GAL
END NET 33729.6 GAL
END ULLAGE 4094.4 GAL
END LEVEL 95.151 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 75.273 F
GROSS DEL 9961.7 GAL
NET DEL 9891.3 GAL

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09/01/2006 20:41

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 2 (MAN 2)

BEGIN TIME 20:10
BEGIN DATE 09/01/2006
BEGIN GROSS 24005.9 GAL
BEGIN NET 23838.3 GAL
BEGIN ULLAGE 14056.2 GAL
BEGIN LEVEL 66.338 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 75.532 F
END TIME 20:27
END DATE 09/01/2006
END GROSS 33967.7 GAL
END NET 33729.6 GAL
END ULLAGE 4094.4 GAL
END LEVEL 92.993 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 75.529 F
GROSS DEL 9961.7 GAL
NET DEL 9891.3 GAL

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09/01/2006 19:28

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 1 (MAN 1)

BEGIN TIME 18:55
BEGIN DATE 09/01/2006
BEGIN GROSS 13885.9 GAL
BEGIN NET 13786.5 GAL
BEGIN ULLAGE 24176.2 GAL
BEGIN LEVEL 45.549 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 75.451 F
END TIME 19:22
END DATE 09/01/2006
END GROSS 24029.3 GAL
END NET 23861.3 GAL
END ULLAGE 14032.8 GAL
END LEVEL 71.405 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 75.182 F
GROSS DEL 10143.4 GAL
NET DEL 10074.8 GAL

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09/01/2006 19:28

TANK DELIVERY REPORT

DIESEL 40065.4 GAL

TANK 2 (MAN 2)

BEGIN TIME 18:55
BEGIN DATE 09/01/2006
BEGIN GROSS 13885.9 GAL
BEGIN NET 13786.5 GAL
BEGIN ULLAGE 24176.2 GAL
BEGIN LEVEL 44.484 IN
BEGIN WATER 0.000 IN
BEGIN WATER 0.0 GAL
BEGIN TEMP 75.997 F
END TIME 19:22
END DATE 09/01/2006
END GROSS 24029.3 GAL
END NET 23861.3 GAL
END ULLAGE 14032.8 GAL
END LEVEL 66.337 IN
END WATER 0.000 IN
END WATER 0.0 GAL
END TEMP 75.558 F
GROSS DEL 10143.4 GAL
NET DEL 10074.8 GAL

FOSS MARITIME
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09/01/2006

7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 08/31/2006
LAST DELIVERY 17:20
LAST DELIVERY 08/29/2006
GROSS CAPACITY 34.1%
BEGIN GROSS 6832.9 GAL
BEGIN NET 6782.7 GAL
BEGIN LEVEL 44.487 IN
BEGIN TEMP 76.167 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 09/01/2006
END GROSS 6832.5 GAL
END NET 6782.4 GAL
END LEVEL 44.485 IN
END TEMP 76.092 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	76.158	13813.24
1:58	76.148	13801.10
2:58	76.139	13807.10
3:58	76.129	13803.16
4:58	76.120	13806.22
5:58	76.111	13806.26
6:58	76.101	13799.93
7:58	76.092	13809.83

SLOPE 0.735 GAL/HR
SLOPE LOW 0.677 GAL/HR
SLOPE HIGH 0.792 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
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09/01/2006

7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 08/31/2006
LAST DELIVERY 17:20
LAST DELIVERY 08/29/2006
GROSS CAPACITY 35.3%
BEGIN GROSS 7075.7 GAL
BEGIN NET 7025.6 GAL
BEGIN LEVEL 45.654 IN
BEGIN TEMP 75.543 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 09/01/2006
END GROSS 7077.3 GAL
END NET 7027.4 GAL
END LEVEL 45.662 IN
END TEMP 75.504 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	75.538	13813.24
1:58	75.533	13801.10
2:58	75.529	13807.10
3:58	75.524	13803.16
4:58	75.519	13806.22
5:58	75.514	13806.26
6:58	75.509	13799.93
7:58	75.504	13809.83

SLOPE 0.735 GAL/HR
SLOPE LOW 0.677 GAL/HR
SLOPE HIGH 0.792 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

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09/01/2006

3:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 08/31/2006
LAST DELIVERY 7:51
LAST DELIVERY 08/01/2006
GROSS CAPACITY 65.2%
BEGIN GROSS 4084.4 GAL
BEGIN NET 4052.6 GAL
BEGIN LEVEL 58.984 IN
BEGIN TEMP 77.111 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.033 IN
END TIME 3:08
END DATE 09/01/2006
END GROSS 4084.4 GAL
END NET 4052.6 GAL
END LEVEL 58.984 IN
END TEMP 77.103 F
END WATER 0.1 GAL
END WATER 0.034 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	77.109	4052.67
1:58	77.106	4052.66
2:58	77.104	4052.69

SLOPE 0.009 GAL/HR
SLOPE LOW 0.008 GAL/HR
SLOPE HIGH 0.010 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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1-503-286-0631

10/01/2006 3:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 23:59
TEST STARTED 09/30/2006
LAST DELIVERY 7:51
LAST DELIVERY 08/01/2006
GROSS CAPACITY 56.4%
BEGIN GROSS 3529.8 GAL
BEGIN NET 3508.0 GAL
BEGIN LEVEL 52.268 IN
BEGIN TEMP 73.527 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.037 IN
END TIME 3:08
END DATE 10/01/2006
END GROSS 3529.7 GAL
END NET 3508.0 GAL
END LEVEL 52.268 IN
END TEMP 73.520 F
END WATER 0.1 GAL
END WATER 0.037 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	73.525	3508.08
1:58	73.523	3508.10
2:58	73.521	3508.11

SLOPE 0.005 GAL/HR
SLOPE LOW 0.004 GAL/HR
SLOPE HIGH 0.006 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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10/03/2006 13:06

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 5:06
TEST STARTED 10/03/2006
LAST DELIVERY 5:53
LAST DELIVERY 10/01/2006
GROSS CAPACITY 62.4%
BEGIN GROSS 12509.9 GAL
BEGIN NET 12458.6 GAL
BEGIN LEVEL 71.218 IN
BEGIN TEMP 69.022 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 13:06
END DATE 10/03/2006
END GROSS 12517.8 GAL
END NET 12466.0 GAL
END LEVEL 71.247 IN
END TEMP 69.087 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
6:06	69.031	24993.56
7:06	69.037	24988.28
8:06	69.044	24989.34
9:06	69.052	24990.15
10:06	69.060	24992.18
11:06	69.068	24987.46
12:06	69.077	24985.27
13:06	69.087	24991.61

SLOPE -0.240 GAL/HR
SLOPE LOW -0.276 GAL/HR
SLOPE HIGH -0.203 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

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09/30/2006 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 3417.9 GAL
NET 3400.4 GAL
PROD LEVEL 27.021 IN
GROSS CAPACITY 17.0%
ULLAGE 15613.1 GAL
TEMPERATURE 71.277 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 1437.1 GAL
NET 1429.4 GAL
PROD LEVEL 14.817 IN
GROSS CAPACITY 7.2%
ULLAGE 17594.0 GAL
TEMPERATURE 71.741 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 3529.7 GAL
NET 3508.0 GAL
PROD LEVEL 52.268 IN
GROSS CAPACITY 56.4%
ULLAGE 2418.0 GAL
TEMPERATURE 73.527 F
WATER LEVEL 0.036 IN
WATER VOLUME 0.1 GAL

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10/03/2006 13:07
LEAK TEST REPORT
TANK 2 20032.7 GAL
DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 95.0%
TEST STARTED 5:06
TEST STARTED 10/03/2006
LAST DELIVERY 5:53
LAST DELIVERY 10/01/2006
GROSS CAPACITY 62.8%
BEGIN GROSS 12576.1 GAL
BEGIN NET 12526.6 GAL
BEGIN LEVEL 71.525 IN
BEGIN TEMP 68.661 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 13:06
END DATE 10/03/2006
END GROSS 12575.7 GAL
END NET 12525.5 GAL
END LEVEL 71.523 IN
END TEMP 68.772 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
6:06	68.675	24986.16
7:06	68.690	24992.59
8:06	68.705	24988.17
9:06	68.719	24986.95
10:06	68.733	24992.09
11:06	68.746	24988.53
12:06	68.759	24992.55
13:06	68.772	24986.32

SLOPE -0.241 GAL/HR
SLOPE LOW -0.277 GAL/HR
SLOPE HIGH -0.204 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
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2006/11/01

15:14

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 7:14
TEST STARTED 2006/11/01
LAST DELIVERY 19:17
LAST DELIVERY 2006/10/30
GROSS CAPACITY 46.3%
BEGIN GROSS 9284.8 GAL
BEGIN NET 9270.1 GAL
BEGIN LEVEL 56.085 IN
BEGIN TEMP 63.480 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:14
END DATE 2006/11/01
END GROSS 9285.1 GAL
END NET 9270.0 GAL
END LEVEL 56.086 IN
END TEMP 63.584 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:14	63.494	19254.33
9:14	63.507	19254.25
10:14	63.520	19254.17
11:14	63.533	19254.04
12:14	63.546	19253.77
13:14	63.558	19253.87
14:14	63.571	19253.72
15:14	63.584	19253.87

SLOPE -0.001 GAL/HR
SLOPE LOW -0.003 GAL/HR
SLOPE HIGH -0.078 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/10/31

23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 10000.1 GAL
NET 9983.6 GAL
PROD LEVEL 59.424 IN
GROSS CAPACITY 49.9%
ULLAGE 9031.0 GAL
TEMPERATURE 63.611 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 9284.6 GAL
NET 9270.3 GAL
PROD LEVEL 56.084 IN
GROSS CAPACITY 46.3%
ULLAGE 9746.5 GAL
TEMPERATURE 63.379 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 2349.1 GAL
NET 2340.8 GAL
PROD LEVEL 38.128 IN
GROSS CAPACITY 37.5%
ULLAGE 3598.6 GAL
TEMPERATURE 67.738 F
WATER LEVEL 0.035 IN
WATER VOLUME 0.1 GAL

FOSS MARITIME
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PORTLAND OREGON 97231
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2006/11/01

15:14

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 7:14
TEST STARTED 2006/11/01
LAST DELIVERY 19:17
LAST DELIVERY 2006/10/30
GROSS CAPACITY 49.9%
BEGIN GROSS 10000.5 GAL
BEGIN NET 9983.7 GAL
BEGIN LEVEL 59.426 IN
BEGIN TEMP 63.587 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:14
END DATE 2006/11/01
END GROSS 10000.9 GAL
END NET 9983.9 GAL
END LEVEL 59.428 IN
END TEMP 63.758 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:14	63.697	19254.26
9:14	63.706	19254.27
10:14	63.714	19254.09
11:14	63.724	19254.12
12:14	63.733	19253.84
13:14	63.741	19253.67
14:14	63.750	19253.54
15:14	63.758	19253.78

SLOPE -0.001 GAL/HR
SLOPE LOW -0.003 GAL/HR
SLOPE HIGH -0.078 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

TIME DEG F GAL
8:14 67.635 2340.96
9:14 67.617 2340.94
10:14 67.605 2340.99
SLOPE -0.005 GAL/HR
SLOPE LOW -0.007 GAL/HR
SLOPE HIGH -0.004 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

HOURLY DATA

TIME DEG F GAL
8:14 67.635 2340.96
9:14 67.617 2340.94
10:14 67.605 2340.99
SLOPE -0.005 GAL/HR
SLOPE LOW -0.007 GAL/HR
SLOPE HIGH -0.004 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/10/11 19:47

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 11:47
TEST STARTED 2006/10/11
LAST DELIVERY 16:12
LAST DELIVERY 2006/10/10
GROSS CAPACITY 31.7%
BEGIN GROSS 6356.1 GAL
BEGIN NET 6329.4 GAL
BEGIN LEVEL 42.175 IN
BEGIN TEMP 69.235 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 19:47
END DATE 2006/10/11
END GROSS 6356.0 GAL
END NET 6329.3 GAL
END LEVEL 42.175 IN
END TEMP 69.237 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
12:46	69.234	10487.27
13:46	69.234	10486.02
14:46	69.234	10487.01
15:46	69.234	10487.27
16:46	69.235	10487.27
17:47	69.235	10487.70
18:46	69.236	10487.50
19:47	69.237	10486.57

SLOPE 0.067 GAL/HR
SLOPE LOW 0.059 GAL/HR
SLOPE HIGH 0.075 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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2006/10/11 14:57

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 11:47
TEST STARTED 2006/10/11
LAST DELIVERY 7:51
LAST DELIVERY 2006/08/01
GROSS CAPACITY 52.0%
BEGIN GROSS 3254.8 GAL
BEGIN NET 3236.9 GAL
BEGIN LEVEL 48.983 IN
BEGIN TEMP 72.947 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.037 IN
END TIME 14:56

END DATE 2006/10/11
END GROSS 3254.4 GAL
END NET 3236.6 GAL
END LEVEL 48.979 IN
END TEMP 72.027 F
END WATER 0.1 GAL
END WATER 0.037 IN

HOURLY DATA

TIME	DEG F	GAL
12:46	72.042	3237.00
13:46	72.031	3236.81
14:46	72.026	3236.71

SLOPE -0.098 GAL/HR
SLOPE LOW -0.100 GAL/HR
SLOPE HIGH -0.097 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/10/11 19:47

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 11:47
TEST STARTED 2006/10/11
LAST DELIVERY 16:12
LAST DELIVERY 2006/10/10
GROSS CAPACITY 20.8%
BEGIN GROSS 4174.3 GAL
BEGIN NET 4156.8 GAL
BEGIN LEVEL 31.129 IN
BEGIN TEMP 69.208 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 19:47

END DATE 2006/10/11
END GROSS 4174.7 GAL
END NET 4157.2 GAL
END LEVEL 31.131 IN
END TEMP 69.201 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
12:46	69.205	10487.27
13:46	69.203	10486.02
14:46	69.202	10487.01
15:46	69.201	10487.27
16:46	69.201	10487.27
17:47	69.201	10487.70
18:46	69.200	10487.50
19:47	69.201	10486.57

SLOPE 0.067 GAL/HR
SLOPE LOW 0.059 GAL/HR
SLOPE HIGH 0.075 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
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PORTLAND OREGON 97231
1-503-286-0631

2006/10/12 3:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2006/10/11
LAST DELIVERY 7:51
LAST DELIVERY 2006/08/01
GROSS CAPACITY 52.0%
BEGIN GROSS 3254.5 GAL
BEGIN NET 3236.8 GAL
BEGIN LEVEL 48.980 IN
BEGIN TEMP 71.958 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.037 IN
END TIME 3:08
END DATE 2006/10/12
END GROSS 3254.6 GAL
END NET 3236.9 GAL
END LEVEL 48.981 IN
END TEMP 71.926 F
END WATER 0.1 GAL
END WATER 0.038 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	71.949	3236.94
1:58	71.940	3236.93
2:58	71.929	3236.99

SLOPE 0.017 GAL/HR
SLOPE LOW 0.016 GAL/HR
SLOPE HIGH 0.018 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/10/12 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2006/10/11
LAST DELIVERY 16:12
LAST DELIVERY 2006/10/10
GROSS CAPACITY 20.8%
BEGIN GROSS 4175.3 GAL
BEGIN NET 4157.8 GAL
BEGIN LEVEL 31.134 IN
BEGIN TEMP 69.197 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2006/10/12
END GROSS 4176.1 GAL
END NET 4158.6 GAL
END LEVEL 31.138 IN
END TEMP 69.191 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	69.197	10488.31
1:58	69.196	10488.27
2:58	69.196	10488.35
3:58	69.194	10488.46
4:58	69.193	10488.62
5:58	69.192	10488.63
6:58	69.192	10488.74
7:58	69.191	10489.08

SLOPE 0.105 GAL/HR
SLOPE LOW 0.097 GAL/HR
SLOPE HIGH 0.112 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
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PORTLAND OREGON 97231
1-503-286-0631

2006/10/12 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2006/10/11
LAST DELIVERY 16:12
LAST DELIVERY 2006/10/10
GROSS CAPACITY 31.7%
BEGIN GROSS 6357.1 GAL
BEGIN NET 6330.4 GAL
BEGIN LEVEL 42.180 IN
BEGIN TEMP 69.235 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2006/10/12
END GROSS 6357.1 GAL
END NET 6330.5 GAL
END LEVEL 42.180 IN
END TEMP 69.227 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	69.234	10488.31
1:58	69.233	10488.27
2:58	69.232	10488.35
3:58	69.231	10488.46
4:58	69.230	10488.62
5:58	69.229	10488.63
6:58	69.228	10488.74
7:58	69.227	10489.08

SLOPE 0.105 GAL/HR
SLOPE LOW 0.097 GAL/HR
SLOPE HIGH 0.112 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

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2006/12/01 19:31

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 11:37
TEST STARTED 2006/12/01
LAST DELIVERY 11:20
LAST DELIVERY 2006/11/30
GROSS CAPACITY 70.9%
BEGIN GROSS 14196.8 GAL
BEGIN NET 14260.7 GAL
BEGIN LEVEL 79.380 IN
BEGIN TEMP 50.089 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 19:37
END DATE 2006/12/01
END GROSS 8897.9 GAL
END NET 8920.8 GAL
END LEVEL 54.275 IN
END TEMP 52.327 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
12:37	50.132	29245.13
13:37	50.174	29245.01
14:37	50.310	25266.68
15:37	50.570	18846.25
16:37	51.060	18847.92
17:37	51.500	18849.99
18:37	51.919	18848.52
19:37	52.327	18850.37

SLOPE -1843.553 GAL/HR
SLOPE L -1879.859 GAL/HR
SLOPE H -1807.246 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

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PORTLAND OREGON 97231
1-503-286-0631

2006/12/01 19:37

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 11:37
TEST STARTED 2006/12/01
LAST DELIVERY 11:20
LAST DELIVERY 2006/11/30
GROSS CAPACITY 74.5%
BEGIN GROSS 14917.1 GAL
BEGIN NET 14984.8 GAL
BEGIN LEVEL 82.990 IN
BEGIN TEMP 49.994 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 19:37
END DATE 2006/12/01
END GROSS 9884.5 GAL
END NET 9921.5 GAL
END LEVEL 58.885 IN
END TEMP 51.742 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
12:37	50.037	29245.13
13:37	50.079	29245.01
14:37	50.109	25266.68
15:37	50.313	18846.25
16:37	50.658	18847.92
17:37	51.022	18849.99
18:37	51.387	18848.52
19:37	51.742	18850.37

SLOPE -1843.553 GAL/HR
SLOPE L -1879.859 GAL/HR
SLOPE H -1807.246 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

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2006/12/01 14:32

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 11:37
TEST STARTED 2006/12/01
LAST DELIVERY 7:51
LAST DELIVERY 2006/08/01
GROSS CAPACITY 26.7%
BEGIN GROSS 1673.2 GAL
BEGIN NET 1673.2 GAL
BEGIN LEVEL 29.710 IN
BEGIN TEMP 60.035 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.029 IN
END TIME 14:32
END DATE 2006/12/01
END GROSS 1673.2 GAL
END NET 1673.2 GAL
END LEVEL 29.709 IN
END TEMP 59.976 F
END WATER 0.1 GAL
END WATER 0.028 IN

HOURLY DATA

TIME	DEG F	GAL
12:37	60.010	1673.28
13:37	59.989	1673.27

SLOPE -0.002 GAL/HR
SLOPE LOW -0.004 GAL/HR
SLOPE HIGH -0.001 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
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2006/12/07 22:13

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 14:13
TEST STARTED 2006/12/07
LAST DELIVERY 5:46
LAST DELIVERY 2006/12/07
GROSS CAPACITY 77.6%
BEGIN GROSS 15552.0 GAL
BEGIN NET 15632.8 GAL
BEGIN LEVEL 86.258 IN
BEGIN TEMP 48.545 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 22:13
END DATE 2006/12/07
END GROSS 15554.7 GAL
END NET 15632.9 GAL
END LEVEL 86.272 IN
END TEMP 48.916 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
15:13	48.603	27839.85
16:13	48.654	27839.69
17:13	48.703	27839.81
18:13	48.751	27839.63
19:13	48.796	27839.40
20:13	48.839	27839.32
21:13	48.877	27839.30
22:13	48.916	27839.37

SLOPE -0.018 GAL/HR
SLOPE LOW -0.022 GAL/HR
SLOPE HIGH -0.014 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/12/05 14:57

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 6:56
TEST STARTED 2006/12/05
LAST DELIVERY 17:35
LAST DELIVERY 2006/12/04
GROSS CAPACITY 47.2%
BEGIN GROSS 9450.2 GAL
BEGIN NET 9488.2 GAL
BEGIN LEVEL 56.858 IN
BEGIN TEMP 51.133 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 14:56
END DATE 2006/12/05
END GROSS 8330.3 GAL
END NET 8362.0 GAL
END LEVEL 51.611 IN
END TEMP 51.603 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:56	51.238	18388.77
8:56	51.324	17646.07
9:56	51.384	17645.89
10:56	51.430	17645.91
11:56	51.474	17645.81
12:56	51.517	17645.75
13:56	51.560	17645.79
14:56	51.603	17645.94

SLOPE -137.158 GAL/HR
SLOPE LO -144.387 GAL/HR
SLOPE HI -129.930 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/12/05 14:56

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 6:56
TEST STARTED 2006/12/05
LAST DELIVERY 17:35
LAST DELIVERY 2006/12/04
GROSS CAPACITY 49.1%
BEGIN GROSS 9836.9 GAL
BEGIN NET 9878.7 GAL
BEGIN LEVEL 58.663 IN
BEGIN TEMP 50.646 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 14:56
END DATE 2006/12/05
END GROSS 9246.5 GAL
END NET 9283.8 GAL
END LEVEL 55.906 IN
END TEMP 51.093 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:56	50.757	18393.39
8:56	50.844	17645.94
9:56	50.889	17645.86
10:56	50.931	17645.94
11:56	50.971	17645.75
12:56	51.010	17645.96
13:56	51.051	17645.82
14:56	51.093	17645.98

SLOPE -137.384 GAL/HR
SLOPE LO -144.616 GAL/HR
SLOPE HI -130.151 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
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2006/12/07 22:14

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 14:13
TEST STARTED 2006/12/07
LAST DELIVERY 5:46
LAST DELIVERY 2006/12/07
GROSS CAPACITY 60.6%
BEGIN GROSS 12139.6 GAL
BEGIN NET 12206.2 GAL
BEGIN LEVEL 69.453 IN
BEGIN TEMP 47.901 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 22:13
END DATE 2006/12/07
END GROSS 12142.5 GAL
END NET 12206.4 GAL
END LEVEL 69.466 IN
END TEMP 48.384 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
15:13	47.969	27839.85
16:13	48.033	27839.69
17:13	48.095	27839.81
18:13	48.157	27839.63
19:13	48.216	27839.40
20:13	48.273	27839.32
21:13	48.330	27839.30
22:13	48.384	27839.37

SLOPE -0.018 GAL/HR
SLOPE LOW -0.022 GAL/HR
SLOPE HIGH -0.014 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/11/30

23:59

TANK INVENTORY DETAIL

- TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 14912.8 GAL
NET 14984.5 GAL
PROD LEVEL 82.968 IN
GROSS CAPACITY 74.4%
ULLAGE 4118.2 GAL
TEMPERATURE 49.408 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 14192.6 GAL
NET 14260.2 GAL
PROD LEVEL 79.360 IN
GROSS CAPACITY 70.8%
ULLAGE 4838.4 GAL
TEMPERATURE 49.512 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 1673.4 GAL
NET 1673.2 GAL
PROD LEVEL 29.712 IN
GROSS CAPACITY 26.7%
ULLAGE 4274.3 GAL
TEMPERATURE 60.253 F
WATER LEVEL 3.029 IN
WATER VOLUME 0.0 GAL

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231

2007/01/01

2:24

LEAK TEST REPORT

TANK 3

6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
EVIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/01/01
LAST DELIVERY 7:51
LAST DELIVERY 2006/08/01
GROSS CAPACITY 12.1%
BEGIN GROSS 758.1 GAL
BEGIN NET 760.1 GAL
BEGIN LEVEL 16.973 IN
BEGIN TEMP 54.288 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.021 IN
END TIME 2:24
END DATE 2007/01/02
END GROSS 758.1 GAL
END NET 760.1 GAL
END LEVEL 16.973 IN
END TEMP 54.264 F
END WATER 0.0 GAL
END WATER 0.021 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	54.263	760.11
1:58	54.268	760.09

SLOPE 0.002 GAL/HR
SLOPE LOW 0.000 GAL/HR
SLOPE HIGH 0.003 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/12/31

23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1	20032.7 GAL
MANIFOLD	MAN 1
PRODUCT	DIESEL
GROSS	6806.0 GAL
NET	6841.5 GAL
PROD LEVEL	44.357 IN
GROSS CAPACITY	34.0%
ULLAGE	12225.0 GAL
TEMPERATURE	48.498 F
WATER LEVEL	0.000 IN
WATER VOLUME	0.0 GAL

TANK 2

TANK NO. 2	20032.7 GAL
MANIFOLD	MAN 1
PRODUCT	DIESEL
GROSS	6537.9 GAL
NET	6569.8 GAL
PROD LEVEL	43.060 IN
GROSS CAPACITY	32.6%
ULLAGE	12493.1 GAL
TEMPERATURE	49.233 F
WATER LEVEL	0.000 IN
WATER VOLUME	0.0 GAL

TANK 3

TANK NO. 3	6260.8 GAL
PRODUCT	30 WT OIL
GROSS	758.2 GAL
NET	760.1 GAL
PROD LEVEL	16.974 IN
GROSS CAPACITY	12.1%
ULLAGE	5189.5 GAL
TEMPERATURE	54.449 F
WATER LEVEL	0.022 IN
WATER VOLUME	0.0 GAL

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2007/01/02 7:58

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/01/01
LAST DELIVERY 2:17
LAST DELIVERY 2007/01/01
GROSS CAPACITY 37.3%
BEGIN GROSS 7472.2 GAL
BEGIN NET 7508.5 GAL
BEGIN LEVEL 47.549 IN
BEGIN TEMP 49.287 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/01/02
END GROSS 7473.2 GAL
END NET 7508.8 GAL
END LEVEL 47.554 IN
END TEMP 49.507 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	49.315	14674.50
1:58	49.343	14674.29
2:58	49.372	14674.16
3:58	49.397	14674.06
4:58	49.425	14674.24
5:58	49.454	14674.33
6:58	49.479	14674.54
7:58	49.507	14675.19

SLOPE 0.029 GAL/HR
SLOPE LOW 0.025 GAL/HR
SLOPE HIGH 0.033 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

2007/01/02 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/01/01
LAST DELIVERY 2:17
LAST DELIVERY 2007/01/01
GROSS CAPACITY 35.6%
BEGIN GROSS 7130.9 GAL
BEGIN NET 7166.2 GAL
BEGIN LEVEL 45.919 IN
BEGIN TEMP 49.083 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/01/02
END GROSS 7132.2 GAL
END NET 7166.4 GAL
END LEVEL 45.925 IN
END TEMP 49.422 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	49.133	14674.50
1:58	49.179	14674.29
2:58	49.222	14674.16
3:58	49.264	14674.06
4:58	49.304	14674.24
5:58	49.346	14674.33
6:58	49.384	14674.54
7:58	49.422	14675.19

SLOPE 0.029 GAL/HR
SLOPE LOW 0.025 GAL/HR
SLOPE HIGH 0.033 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

LEAK

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PORTLAND OREGON 97231
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2007/02/02 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/02/01
LAST DELIVERY 18:51
LAST DELIVERY 2007/01/31
GROSS CAPACITY 67.6%
BEGIN GROSS 13544.3 GAL
BEGIN NET 13617.4 GAL
BEGIN LEVEL 76.181 IN
BEGIN TEMP 47.776 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:59
END DATE 2007/02/02
END GROSS 13543.1 GAL
END NET 13617.4 GAL
END LEVEL 76.175 IN
END TEMP 47.887 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	47.792	27924.60
1:58	47.806	27922.94
2:58	47.821	27924.33
3:58	47.837	27924.55
4:58	47.850	27922.11
5:59	47.863	27924.63
6:58	47.876	27922.08
7:59	47.887	27924.74

SLOPE 0.075 GAL/HR
SLOPE LOW 0.057 GAL/HR
SLOPE HIGH 0.094 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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2007/02/02 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/02/01
LAST DELIVERY 18:51
LAST DELIVERY 2007/01/31
GROSS CAPACITY 71.0%
BEGIN GROSS 14227.2 GAL
BEGIN NET 14303.9 GAL
BEGIN LEVEL 79.531 IN
BEGIN TEMP 48.104 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:59
END DATE 2007/02/02
END GROSS 14231.6 GAL
END NET 14307.3 GAL
END LEVEL 79.553 IN
END TEMP 48.277 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	48.127	27924.60
1:58	48.150	27922.94
2:58	48.172	27924.33
3:58	48.194	27924.55
4:58	48.215	27922.11
5:59	48.235	27924.63
6:58	48.257	27922.08
7:59	48.277	27924.74

SLOPE 0.075 GAL/HR
SLOPE LOW 0.057 GAL/HR
SLOPE HIGH 0.094 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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2007/02/02 3:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/02/01
LAST DELIVERY 10:33
LAST DELIVERY 2007/01/18
GROSS CAPACITY 66.0%
BEGIN GROSS 4129.8 GAL
BEGIN NET 4133.0 GAL
BEGIN LEVEL 59.542 IN
BEGIN TEMP 58.329 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.026 IN
END TIME 3:09
END DATE 2007/02/02
END GROSS 4129.7 GAL
END NET 4133.0 GAL
END LEVEL 59.540 IN
END TEMP 58.244 F
END WATER 0.0 GAL
END WATER 0.026 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	58.304	4133.04
1:58	58.279	4132.95
2:58	58.245	4133.02

SLOPE -0.007 GAL/HR
SLOPE LOW -0.009 GAL/HR
SLOPE HIGH -0.004 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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2007/01/31 23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 13542.5 GAL
NET 13621.0 GAL
PROD LEVEL 76.172 IN
GROSS CAPACITY 67.6%
ULLAGE 5408.5 GAL
TEMPERATURE 47.223 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 14221.7 GAL
NET 14303.5 GAL
PROD LEVEL 79.504 IN
GROSS CAPACITY 71.0%
ULLAGE 4909.3 GAL
TEMPERATURE 47.318 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 4485.3 GAL
NET 4487.3 GAL
PROD LEVEL 63.984 IN
GROSS CAPACITY 71.6%
ULLAGE 1462.4 GAL
TEMPERATURE 59.012 F
WATER LEVEL 0.026 IN
WATER VOLUME 0.0 GAL

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2007/03/01 16:00

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 7:59
TEST STARTED 2007/03/01
LAST DELIVERY 7:42
LAST DELIVERY 2007/02/28
GROSS CAPACITY 78.9%
BEGIN GROSS 15807.6 GAL
BEGIN NET 15894.3 GAL
BEGIN LEVEL 87.602 IN
BEGIN TEMP 47.910 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:59
END DATE 2007/03/01
END GROSS 15803.0 GAL
END NET 15887.5 GAL
END LEVEL 87.578 IN
END TEMP 48.211 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:59	47.948	31115.85
9:59	47.985	31115.85
10:59	48.021	31115.77
11:59	48.057	31115.44
12:59	48.119	31107.01
13:59	48.143	31106.74
14:59	48.180	31106.52
15:59	48.211	31106.59

SLOPE -1.686 GAL/HR
SLOPE LOW -1.723 GAL/HR
SLOPE HIGH -1.650 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

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2007/03/01 15:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 7:59
TEST STARTED 2007/03/01
LAST DELIVERY 7:42
LAST DELIVERY 2007/02/28
GROSS CAPACITY 75.6%
BEGIN GROSS 15150.8 GAL
BEGIN NET 15221.5 GAL
BEGIN LEVEL 84.182 IN
BEGIN TEMP 49.714 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:59
END DATE 2007/03/01
END GROSS 15149.6 GAL
END NET 15219.1 GAL
END LEVEL 84.176 IN
END TEMP 49.887 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:59	49.737	31115.85
9:59	49.758	31115.85
10:59	49.779	31115.77
11:59	49.799	31115.44
12:59	49.828	31107.01
13:59	49.848	31106.74
14:59	49.868	31106.52
15:59	49.887	31106.59

SLOPE -1.686 GAL/HR
SLOPE LOW -1.723 GAL/HR
SLOPE HIGH -1.650 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
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2007/03/01 11:09

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 7:59
TEST STARTED 2007/03/01
LAST DELIVERY 10:33
LAST DELIVERY 2007/01/18
GROSS CAPACITY 50.3%
BEGIN GROSS 3148.0 GAL
BEGIN NET 3156.9 GAL
BEGIN LEVEL 47.710 IN
BEGIN TEMP 53.751 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.018 IN
END TIME 11:09
END DATE 2007/03/01
END GROSS 3147.9 GAL
END NET 3156.8 GAL
END LEVEL 47.709 IN
END TEMP 53.725 F
END WATER 0.0 GAL
END WATER 0.018 IN

HOURLY DATA

TIME	DEG F	GAL
8:59	53.745	3156.95
9:59	53.726	3156.95
10:59	53.726	3156.87

SLOPE -0.029 GAL/HR
SLOPE LOW -0.030 GAL/HR
SLOPE HIGH -0.027 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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2007/03/02 0:01

2007/03/02 0:00

LEAK TEST REPORT

LEAK TEST REPORT

2007/03/02 3:09

TANK 2 20032.7 GAL

TANK 1 20032.7 GAL

LEAK TEST REPORT

DIESEL

DIESEL

TANK 3 6260.8 GAL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 16:00
TEST STARTED 2007/03/01
LAST DELIVERY 7:42
LAST DELIVERY 2007/02/28
GROSS CAPACITY 78.9%
BEGIN GROSS 15803.1 GAL
BEGIN NET 15887.6 GAL
BEGIN LEVEL 87.528 IN

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 16:00
TEST STARTED 2007/03/01
LAST DELIVERY 7:42
LAST DELIVERY 2007/02/28
GROSS CAPACITY 75.6%
BEGIN GROSS 15149.6 GAL
BEGIN NET 15219.1 GAL
BEGIN LEVEL 84.176 IN

30 WT OIL
LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/03/01
LAST DELIVERY 10:33
LAST DELIVERY 2007/01/18
GROSS CAPACITY 50.3%
BEGIN GROSS 3147.8 GAL
BEGIN NET 3156.9 GAL
BEGIN LEVEL 47.707 IN
BEGIN TEMP 53.601 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.018 IN
END TIME 3:08
END DATE 2007/03/02
END GROSS 3147.8 GAL
END NET 3157.0 GAL
END LEVEL 47.708 IN
END TEMP 53.587 F
END WATER 0.0 GAL
END WATER 0.018 IN

BEGIN TEMP 48.212 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 0:00
END DATE 2007/03/02
END GROSS 15804.6 GAL
END NET 15887.4 GAL
END LEVEL 87.586 IN
END TEMP 48.445 F
END WATER 0.0 GAL
END WATER 0.000 IN

BEGIN TEMP 49.888 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 0:00
END DATE 2007/03/02
END GROSS 15150.4 GAL
END NET 15219.0 GAL
END LEVEL 84.180 IN
END TEMP 50.026 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

HOURLY DATA

HOURLY DATA

TIME	DEG F	GAL
0:59	53.607	3156.98
1:59	53.583	3156.98
2:59	53.587	3156.95

SLOPE 0.008 GAL/HR
SLOPE LOW 0.007 GAL/HR
SLOPE HIGH 0.010 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

TIME	DEG F	GAL
17:00	48.244	31106.79
18:00	48.274	31106.37
19:00	48.304	31106.40
20:00	48.334	31106.26
21:00	48.362	31106.96
22:00	48.390	31106.62
23:00	48.419	31106.57
0:00	48.445	31106.42

SLOPE -0.013 GAL/HR
SLOPE LOW -0.017 GAL/HR
SLOPE HIGH -0.010 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

TIME	DEG F	GAL
17:00	49.909	31106.79
18:00	49.930	31106.37
19:00	49.949	31106.40
20:00	49.966	31106.26
21:00	49.982	31106.96
22:00	49.997	31106.62
23:00	50.013	31106.57
0:00	50.026	31106.42

SLOPE -0.013 GAL/HR
SLOPE LOW -0.017 GAL/HR
SLOPE HIGH -0.010 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

ROSS MARITIME
9930 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/02/28

23:59

TANK INVENTORY DETAIL

TANK 1

TANK NO. 1 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 15149.1 GAL
NET 15221.3 GAL
PROD LEVEL 84.173 IN
GROSS CAPACITY 75.6%
ULLAGE 3881.9 GAL
TEMPERATURE 49.495 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 2

TANK NO. 2 20032.7 GAL
MANIFOLD MAN 1
PRODUCT DIESEL
GROSS 15804.4 GAL
NET 15893.5 GAL
PROD LEVEL 87.585 IN
GROSS CAPACITY 78.0%
ULLAGE 3226.6 GAL
TEMPERATURE 47.565 F
WATER LEVEL 0.000 IN
WATER VOLUME 0.0 GAL

TANK 3

TANK NO. 3 6260.8 GAL
PRODUCT 30 WT OIL
GROSS 3148.1 GAL
NET 3156.9 GAL
PROD LEVEL 47.711 IN
GROSS CAPACITY 50.3%
ULLAGE 2799.6 GAL
TEMPERATURE 53.820 F
WATER LEVEL 0.019 IN
WATER VOLUME 0.0 GAL

FOSS MARITIME
9030 NW ST HELENS RD
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2007/04/02 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/04/01
LAST DELIVERY 4:49
LAST DELIVERY 2007/03/27
GROSS CAPACITY 58.7%
BEGIN GROSS 11749.5 GAL
BEGIN NET 11783.0 GAL
BEGIN LEVEL 67.611 IN
BEGIN TEMP 53.707 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/04/02
END GROSS 11750.1 GAL
END NET 11783.4 GAL
END LEVEL 67.614 IN
END TEMP 53.752 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	53.712	23075.05
1:58	53.718	23075.10
2:58	53.724	23075.12
3:58	53.729	23074.96
4:58	53.735	23074.94
5:58	53.741	23074.86
6:58	53.747	23075.46
7:58	53.752	23075.48

SLOPE 0.043 GAL/HR
SLOPE LOW 0.041 GAL/HR
SLOPE HIGH 0.046 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
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2007/04/02 3:04

LEAK TEST REPORT

TANK 3 6268.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/04/01
LAST DELIVERY 10:33
LAST DELIVERY 2007/01/18
GROSS CAPACITY 32.2%
BEGIN GROSS 2018.1 GAL
BEGIN NET 2022.8 GAL
BEGIN LEVEL 34.063 IN
BEGIN TEMP 54.905 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.015 IN
END TIME 3:03
END DATE 2007/04/02
END GROSS 2018.1 GAL
END NET 2022.8 GAL
END LEVEL 34.063 IN
END TEMP 54.913 F
END WATER 0.0 GAL
END WATER 0.015 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	54.908	2022.80
1:58	54.910	2022.80
2:58	54.913	2022.83

SLOPE 0.001 GAL/HR
SLOPE LOW -0.000 GAL/HR
SLOPE HIGH 0.002 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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2007/04/02 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/04/01
LAST DELIVERY 4:49
LAST DELIVERY 2007/03/27
GROSS CAPACITY 56.2%
BEGIN GROSS 11257.8 GAL
BEGIN NET 11291.9 GAL
BEGIN LEVEL 65.301 IN
BEGIN TEMP 53.324 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/04/02
END GROSS 11258.2 GAL
END NET 11292.0 GAL
END LEVEL 65.303 IN
END TEMP 53.373 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	53.330	23075.05
1:58	53.336	23075.10
2:58	53.342	23075.12
3:58	53.349	23074.96
4:58	53.354	23074.94
5:58	53.360	23074.86
6:58	53.367	23075.46
7:58	53.373	23075.48

SLOPE 0.043 GAL/HR
SLOPE LOW 0.041 GAL/HR
SLOPE HIGH 0.046 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

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9030 NW ST HELENS RD
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2007/05/01 10:19

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 7:44
TEST STARTED 2007/05/01
LAST DELIVERY 10:33
LAST DELIVERY 2007/04/30
GROSS CAPACITY 15.3%
BEGIN GROSS 957.9 GAL
BEGIN NET 958.9 GAL
BEGIN LEVEL 19.982 IN
BEGIN TEMP 57.667 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.014 IN
END TIME 10:19
END DATE 2007/05/01
END GROSS 957.9 GAL
END NET 958.9 GAL
END LEVEL 19.981 IN
END TEMP 57.691 F
END WATER 0.0 GAL
END WATER 0.015 IN

HOURLY DATA

TIME	DEG F	GAL
8:44	57.676	958.92
9:44	57.686	958.97

SLOPE -0.026 GAL/HR
SLOPE LOW -0.028 GAL/HR
SLOPE HIGH -0.024 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

2007/05/01 15:45

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 7:44
TEST STARTED 2007/05/01
LAST DELIVERY 22:11
LAST DELIVERY 2007/04/30
GROSS CAPACITY 76.2%
BEGIN GROSS 15264.5 GAL
BEGIN NET 15275.9 GAL
BEGIN LEVEL 84.767 IN
BEGIN TEMP 58.358 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:44
END DATE 2007/05/01
END GROSS 15264.5 GAL
END NET 15276.3 GAL
END LEVEL 84.767 IN
END TEMP 58.300 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:44	58.349	29899.71
9:44	58.340	29899.67
10:44	58.332	29899.51
11:44	58.325	29899.94
12:44	58.318	29898.81
13:44	58.312	29898.85
14:44	58.306	29898.83
15:44	58.300	29899.06

SLOPE -0.144 GAL/HR
SLOPE LOW -0.147 GAL/HR
SLOPE HIGH -0.141 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/05/01 15:44

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 7:44
TEST STARTED 2007/05/01
LAST DELIVERY 22:11
LAST DELIVERY 2007/04/30
GROSS CAPACITY 72.9%
BEGIN GROSS 14610.4 GAL
BEGIN NET 14623.8 GAL
BEGIN LEVEL 81.441 IN
BEGIN TEMP 57.970 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 15:44
END DATE 2007/05/01
END GROSS 14609.0 GAL
END NET 14622.7 GAL
END LEVEL 81.435 IN
END TEMP 57.934 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
8:44	57.964	29899.71
9:44	57.960	29899.67
10:44	57.955	29899.51
11:44	57.950	29899.94
12:44	57.946	29898.81
13:44	57.942	29898.85
14:44	57.938	29898.83
15:44	57.934	29899.06

SLOPE -0.144 GAL/HR
SLOPE LOW -0.147 GAL/HR
SLOPE HIGH -0.141 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/01/01 13:50

ALARM REPORT

2007/05/02 13:49
POWER DOWN

2008/01/01 13:49
POWER UP

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/01/02 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2008/01/01
LAST DELIVERY 22:11
LAST DELIVERY 2007/04/30
GROSS CAPACITY 72.9%
BEGIN GROSS 14607.7 GAL
BEGIN NET 14621.8 GAL
BEGIN LEVEL 81.428 IN
BEGIN TEMP 57.883 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2008/01/02
END GROSS 14607.6 GAL
END NET 14621.6 GAL
END LEVEL 81.427 IN
END TEMP 57.881 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	57.883	29899.73
1:58	57.883	29899.83
2:58	57.882	29899.82
3:58	57.882	29899.81
4:58	57.882	29899.71
5:58	57.882	29899.70
6:58	57.882	29899.85
7:58	57.881	29899.67

SLOPE -0.009 GAL/HR
SLOPE LOW -0.010 GAL/HR
SLOPE HIGH -0.008 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/01/02 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2008/01/01
LAST DELIVERY 22:11
LAST DELIVERY 2007/04/30
GROSS CAPACITY 76.2%
BEGIN GROSS 15265.6 GAL
BEGIN NET 15278.0 GAL
BEGIN LEVEL 84.772 IN
BEGIN TEMP 58.199 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2008/01/02
END GROSS 15265.5 GAL
END NET 15278.0 GAL
END LEVEL 84.772 IN
END TEMP 58.189 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	58.198	29899.73
1:58	58.197	29899.83
2:58	58.195	29899.82
3:58	58.194	29899.81
4:58	58.192	29899.71
5:58	58.191	29899.70
6:58	58.190	29899.85
7:58	58.189	29899.67

SLOPE -0.009 GAL/HR
SLOPE LOW -0.010 GAL/HR
SLOPE HIGH -0.008 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/01/02 2:34

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2008/01/01
LAST DELIVERY 10:33
LAST DELIVERY 2007/01/18
GROSS CAPACITY 15.3%
BEGIN GROSS 958.0 GAL
BEGIN NET 958.8 GAL
BEGIN LEVEL 19.983 IN
BEGIN TEMP 58.044 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.015 IN
END TIME 2:33
END DATE 2008/01/02
END GROSS 958.0 GAL
END NET 958.8 GAL
END LEVEL 19.983 IN
END TEMP 58.067 F
END WATER 0.0 GAL
END WATER 0.014 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	58.053	958.83
1:58	58.062	958.84

SLOPE -0.001 GAL/HR
SLOPE LOW -0.002 GAL/HR
SLOPE HIGH -0.000 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/05/01 23:46

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 15:46
TEST STARTED 2007/05/01
LAST DELIVERY 22:11
LAST DELIVERY 2007/04/30
GROSS CAPACITY 76.2%
BEGIN GROSS 15264.6 GAL
BEGIN NET 15276.4 GAL
BEGIN LEVEL 84.767 IN
BEGIN TEMP 58.300 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 23:46
END DATE 2007/05/01
END GROSS 15265.5 GAL
END NET 15277.6 GAL
END LEVEL 84.772 IN
END TEMP 58.263 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
16:46	58.295	29899.46
17:46	58.290	29899.54
18:46	58.285	29899.74
19:46	58.280	29899.74
20:46	58.275	29899.70
21:46	58.271	29899.76
22:46	58.267	29899.64
23:46	58.263	29900.16

SLOPE 0.002 GAL/HR
SLOPE LOW 0.000 GAL/HR
SLOPE HIGH 0.005 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/05/01 23:46

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 15:46
TEST STARTED 2007/05/01
LAST DELIVERY 22:11
LAST DELIVERY 2007/04/30
GROSS CAPACITY 72.9%
BEGIN GROSS 14609.1 GAL
BEGIN NET 14622.8 GAL
BEGIN LEVEL 81.435 IN
BEGIN TEMP 57.935 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 23:46
END DATE 2007/05/01
END GROSS 14608.7 GAL
END NET 14622.5 GAL
END LEVEL 81.433 IN
END TEMP 57.912 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
16:46	57.931	29899.36
17:46	57.928	29899.61
18:46	57.925	29899.55
19:46	57.922	29899.62
20:46	57.919	29899.74
21:46	57.917	29899.70
22:46	57.914	29899.52
23:46	57.912	29900.16

SLOPE 0.002 GAL/HR
SLOPE LOW 0.000 GAL/HR
SLOPE HIGH 0.005 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

TANK 3

30 WT-OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/05/01
LAST DELIVERY 10:33
LAST DELIVERY 2007/01/18
GROSS CAPACITY 15.3%
BEGIN GROSS 958.0 GAL
BEGIN NET 959.0 GAL
BEGIN LEVEL 19.984 IN
BEGIN TEMP 57.824 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.014 IN
END TIME 2:33
END DATE 2007/05/02
END GROSS 958.0 GAL
END NET 959.0 GAL
END LEVEL 19.983 IN
END TEMP 57.847 F
END WATER 0.0 GAL
END WATER 0.014 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	57.832	959.00
1:58	57.842	958.97

SLOPE -0.004 GAL/HR
SLOPE LOW -0.006 GAL/HR
SLOPE HIGH -0.003 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/05/02 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/05/01
LAST DELIVERY 22:11
LAST DELIVERY 2007/04/30
GROSS CAPACITY 72.9%
BEGIN GROSS 14608.8 GAL
BEGIN NET 14622.7 GAL
BEGIN LEVEL 81.434 IN
BEGIN TEMP 57.912 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/05/02
END GROSS 14608.3 GAL
END NET 14622.3 GAL
END LEVEL 81.431 IN
END TEMP 57.897 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	57.909	29900.04
1:58	57.907	29900.17
2:58	57.905	29900.28
3:58	57.903	29900.34
4:58	57.901	29900.36
5:58	57.900	29900.24
6:58	57.898	29900.11
7:58	57.897	29900.05

SLOPE -0.015 GAL/HR
SLOPE LOW -0.017 GAL/HR
SLOPE HIGH -0.014 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/05/02 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/05/01
LAST DELIVERY 22:11
LAST DELIVERY 2007/04/30
GROSS CAPACITY 76.2%
BEGIN GROSS 15265.6 GAL
BEGIN NET 15277.7 GAL
BEGIN LEVEL 84.772 IN
BEGIN TEMP 58.262 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/05/02
END GROSS 15265.6 GAL
END NET 15277.8 GAL
END LEVEL 84.772 IN
END TEMP 58.235 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	58.258	29900.04
1:58	58.255	29900.17
2:58	58.251	29900.28
3:58	58.248	29900.34
4:58	58.245	29900.36
5:58	58.241	29900.24
6:58	58.238	29900.11
7:58	58.235	29900.05

SLOPE -0.015 GAL/HR
SLOPE LOW -0.017 GAL/HR
SLOPE HIGH -0.014 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/07/02 16:07

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 8:06
TEST STARTED 2007/07/02
LAST DELIVERY 17:24
LAST DELIVERY 2007/06/30
GROSS CAPACITY 49.0%
BEGIN GROSS 9813.5 GAL
BEGIN NET 9770.1 GAL
BEGIN LEVEL 58.554 IN
BEGIN TEMP 69.728 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 16:06
END DATE 2007/07/02
END GROSS 8916.8 GAL
END NET 8876.7 GAL
END LEVEL 54.364 IN
END TEMP 69.876 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
9:06	69.729	22283.20
10:06	69.729	22282.31
11:06	69.730	22276.59
12:06	69.731	22287.92
13:06	69.731	22285.33
14:06	69.732	22275.63
15:06	69.732	22283.07
16:06	69.876	19612.66

SLOPE -72.718 GAL/HR
SLOPE LOW -78.999 GAL/HR
SLOPE HIGH -66.437 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/07/02 16:06

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 8:06
TEST STARTED 2007/07/02
LAST DELIVERY 17:24
LAST DELIVERY 2007/06/30
GROSS CAPACITY 62.7%
BEGIN GROSS 12567.0 GAL
BEGIN NET 12507.3 GAL
BEGIN LEVEL 71.482 IN
BEGIN TEMP 70.442 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 16:06
END DATE 2007/07/02
END GROSS 10787.5 GAL
END NET 10735.9 GAL
END LEVEL 63.100 IN
END TEMP 70.512 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
9:06	70.441	22283.20
10:06	70.439	22282.31
11:06	70.437	22276.59
12:06	70.436	22287.92
13:06	70.433	22285.33
14:06	70.430	22275.63
15:06	70.426	22283.07
16:06	70.512	19612.66

SLOPE -72.718 GAL/HR
SLOPE LOW -78.999 GAL/HR
SLOPE HIGH -66.437 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/07/02 3:09

LEAK TEST REPORT

TANK 7 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/07/01
LAST DELIVERY 10:48
LAST DELIVERY 2008/01/21
GROSS CAPACITY 64.2%
BEGIN GROSS 4017.6 GAL
BEGIN NET 3998.6 GAL
BEGIN LEVEL 58.164 IN
BEGIN TEMP 70.396 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.027 IN
END TIME 3:08
END DATE 2007/07/02
END GROSS 4017.6 GAL
END NET 3998.6 GAL
END LEVEL 59.164 IN
END TEMP 70.401 F
END WATER 0.0 GAL
END WATER 0.026 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	70.397	3998.66
1:58	70.399	3998.65
2:58	70.400	3998.68

SLOPE 0.002 GAL/HR
SLOPE LOW 0.001 GAL/HR
SLOPE HIGH 0.003 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/07/02 7:59

LEAK-TEST-REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/07/01
LAST DELIVERY 17:24
LAST DELIVERY 2007/06/30
GROSS CAPACITY 49.0%
BEGIN GROSS 9813.4 GAL
BEGIN NET 9770.0 GAL
BEGIN LEVEL 58.553 IN
BEGIN TEMP 69.720 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/07/02
END GROSS 9813.4 GAL
END NET 9770.0 GAL
END LEVEL 58.553 IN
END TEMP 69.728 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	69.721	22280.48
1:58	69.722	22273.19
2:58	69.723	22292.96
3:58	69.724	22280.45
4:58	69.725	22283.74
5:58	69.726	22285.71
6:58	69.727	22288.78
7:58	69.728	22287.80

SLOPE 0.018 GAL/HR
SLOPE LOW -0.075 GAL/HR
SLOPE HIGH 0.111 GAL/HR
TEST RESULT INCOMPLETE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/07/02 7:59

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/07/01
LAST DELIVERY 17:24
LAST DELIVERY 2007/06/30
GROSS CAPACITY 62.8%
BEGIN GROSS 125847.8 GAL
BEGIN NET 12524.9 GAL
BEGIN LEVEL 71.566 IN
BEGIN TEMP 70.453 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/07/02
END GROSS 12577.5 GAL
END NET 12517.8 GAL
END LEVEL 71.532 IN
END TEMP 70.442 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	70.451	22280.48
1:58	70.449	22273.19
2:58	70.449	22292.96
3:58	70.447	22280.45
4:58	70.446	22283.74
5:58	70.444	22285.71
6:58	70.443	22288.78
7:58	70.442	22287.80

SLOPE 0.018 GAL/HR
SLOPE LOW -0.075 GAL/HR
SLOPE HIGH 0.111 GAL/HR
TEST RESULT INCOMPLETE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/06/04 16:21

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 8:21
TEST STARTED 2007/06/04
LAST DELIVERY 16:40
LAST DELIVERY 2008/01/31
GROSS CAPACITY 52.5%
BEGIN GROSS 10518.9 GAL
BEGIN NET 10470.5 GAL
BEGIN LEVEL 61.845 IN
BEGIN TEMP 70.120 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 16:21
END DATE 2007/06/04
END GROSS 10503.8 GAL
END NET 10456.1 GAL
END LEVEL 61.775 IN
END TEMP 69.981 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
9:21	70.102	21700.22
10:21	70.083	21681.32
11:21	70.065	21703.26
12:21	70.047	21698.68
13:21	70.031	21702.64
14:21	70.013	21692.40
15:21	69.997	21701.75
16:21	69.981	21691.39

SLOPE -0.251 GAL/HR
SLOPE LOW -0.353 GAL/HR
SLOPE HIGH -0.149 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/06/04 16:22

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 8:21
TEST STARTED 2007/06/04
LAST DELIVERY 16:40
LAST DELIVERY 2008/01/31
GROSS CAPACITY 56.4%
BEGIN GROSS 11289.8 GAL
BEGIN NET 11235.1 GAL
BEGIN LEVEL 65.451 IN
BEGIN TEMP 70.652 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 16:21
END DATE 2007/06/04
END GROSS 11289.3 GAL
END NET 11235.3 GAL
END LEVEL 65.449 IN
END TEMP 70.531 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
9:21	70.637	21700.22
10:21	70.621	21681.32
11:21	70.605	21703.26
12:21	70.590	21698.68
13:21	70.575	21702.64
14:21	70.560	21692.40
15:21	70.546	21701.75
16:21	70.531	21691.39

SLOPE -0.251 GAL/HR
SLOPE LOW -0.353 GAL/HR
SLOPE HIGH -0.149 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/06/04 11:31

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 8:21
TEST STARTED 2007/06/04
LAST DELIVERY 10:48
LAST DELIVERY 2008/01/21
GROSS CAPACITY 84.1%
BEGIN GROSS 5268.2 GAL
BEGIN NET 5238.9 GAL
BEGIN LEVEL 74.515 IN
BEGIN TEMP 72.258 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.028 IN
END TIME 11:31
END DATE 2007/06/04
END GROSS 5268.2 GAL
END NET 5238.9 GAL
END LEVEL 74.514 IN
END TEMP 72.233 F
END WATER 0.1 GAL
END WATER 0.028 IN

HOURLY DATA

TIME	DEG F	GAL
9:21	72.250	5238.88
10:21	72.242	5238.89
11:21	72.235	5238.92

SLOPE 0.005 GAL/HR
SLOPE LOW 0.004 GAL/HR
SLOPE HIGH 0.006 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/08/02

7:59

LEAK TEST REPORT

TANK 2

20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/08/01
LAST DELIVERY 9:31
LAST DELIVERY 2007/07/31
GROSS CAPACITY 66.0%
BEGIN GROSS 13228.3 GAL
BEGIN NET 13141.6 GAL
BEGIN LEVEL 74.612 IN
BEGIN TEMP 73.072 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/08/02
END GROSS 13221.0 GAL
END NET 13142.3 GAL
END LEVEL 74.616 IN
END TEMP 73.089 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:59	73.074	25517.76
1:58	73.076	25513.65
2:58	73.079	25504.57
3:59	73.081	25510.18
4:58	73.083	25515.30
5:58	73.085	25519.26
6:58	73.087	25508.32
7:58	73.089	25522.47

SLOPE -0.152 GAL/HR
SLOPE LOW -0.247 GAL/HR
SLOPE HIGH -0.058 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/08/02

7:58

LEAK TEST REPORT

TANK 1

20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/08/01
LAST DELIVERY 9:31
LAST DELIVERY 2007/07/31
GROSS CAPACITY 62.2%
BEGIN GROSS 12452.7 GAL
BEGIN NET 12379.2 GAL
BEGIN LEVEL 70.937 IN
BEGIN TEMP 72.961 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/08/02
END GROSS 12451.7 GAL
END NET 12378.2 GAL
END LEVEL 70.933 IN
END TEMP 72.983 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	72.964	25516.68
1:58	72.966	25519.86
2:58	72.969	25508.65
3:58	72.971	25512.16
4:58	72.975	25516.32
5:58	72.977	25512.25
6:58	72.980	25515.45
7:58	72.983	25520.40

SLOPE -0.154 GAL/HR
SLOPE LOW -0.248 GAL/HR
SLOPE HIGH -0.059 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/08/02

2:55

LEAK TEST REPORT

TANK 3

6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/08/01
LAST DELIVERY 10:48
LAST DELIVERY 2008/01/21
GROSS CAPACITY 30.0%
BEGIN GROSS 1879.4 GAL
BEGIN NET 1867.3 GAL
BEGIN LEVEL 32.330 IN
BEGIN TEMP 74.115 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.026 IN
END TIME 2:58
END DATE 2007/08/02
END GROSS 1879.5 GAL
END NET 1867.4 GAL
END LEVEL 32.331 IN
END TEMP 74.095 F
END WATER 0.1 GAL
END WATER 0.027 IN

HOURLY DATA

TIME	DEG F	GAL
0:59	74.108	1867.43
1:58	74.101	1867.44
2:58	74.095	1867.48

SLOPE 0.010 GAL/HR
SLOPE LOW 0.008 GAL/HR
SLOPE HIGH 0.012 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/08/03 14:49

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 6:49
TEST STARTED 2007/08/03
LAST DELIVERY 9:31
LAST DELIVERY 2007/07/31
GROSS CAPACITY 62.0%
BEGIN GROSS 12424.2 GAL
BEGIN NET 12350.5 GAL
BEGIN LEVEL 70.802 IN
BEGIN TEMP 73.038 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 14:49
END DATE 2007/08/03
END GROSS 12426.2 GAL
END NET 12352.4 GAL
END LEVEL 70.812 IN
END TEMP 73.058 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:49	73.041	25500.97
8:49	73.044	25503.64
9:49	73.045	25498.58
10:49	73.047	25498.52
11:49	73.050	25492.45
12:49	73.052	25499.42
13:49	73.055	25494.20
14:49	73.058	25495.04

SLOPE -0.548 GAL/HR
SLOPE LOW -0.627 GAL/HR
SLOPE HIGH -0.469 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/08/02 16:04

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 8:03
TEST STARTED 2007/08/02
LAST DELIVERY 9:31
LAST DELIVERY 2007/07/31
GROSS CAPACITY 66.0%
BEGIN GROSS 13221.0 GAL
BEGIN NET 13142.3 GAL
BEGIN LEVEL 74.616 IN
BEGIN TEMP 73.089 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 16:03
END DATE 2007/08/02
END GROSS 13220.7 GAL
END NET 13141.9 GAL
END LEVEL 74.614 IN
END TEMP 73.102 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
9:03	73.091	25520.32
10:03	73.092	25521.12
11:03	73.094	25513.74
12:03	73.095	25512.72
13:03	73.098	25504.49
14:03	73.099	25510.30
15:03	73.101	25515.38
16:03	73.102	25509.46

SLOPE -1.448 GAL/HR
SLOPE LOW -1.548 GAL/HR
SLOPE HIGH -1.347 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/08/02 16:03

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 8:03
TEST STARTED 2007/08/02
LAST DELIVERY 9:31
LAST DELIVERY 2007/07/31
GROSS CAPACITY 62.1%
BEGIN GROSS 12442.5 GAL
BEGIN NET 12369.0 GAL
BEGIN LEVEL 70.889 IN
BEGIN TEMP 72.983 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 16:03
END DATE 2007/08/02
END GROSS 12438.1 GAL
END NET 12364.5 GAL
END LEVEL 70.868 IN
END TEMP 73.002 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
9:03	72.986	25523.38
10:03	72.988	25518.13
11:03	72.990	25509.70
12:03	72.991	25516.83
13:03	72.995	25510.49
14:03	72.998	25501.00
15:03	73.000	25510.25
16:03	73.002	25506.37

SLOPE -1.447 GAL/HR
SLOPE LOW -1.547 GAL/HR
SLOPE HIGH -1.346 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
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PORTLAND OREGON 97231
1-503-286-0631

2007/08/03 14:50

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 6:49
TEST STARTED 2007/08/03
LAST DELIVERY 9:31
LAST DELIVERY 2007/07/31
GROSS CAPACITY 66.0%
BEGIN GROSS 13222.3 GAL
BEGIN NET 13143.3 GAL
BEGIN LEVEL 74.622 IN
BEGIN TEMP 73.129 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 14:49
END DATE 2007/08/03
END GROSS 13221.7 GAL
END NET 13142.6 GAL
END LEVEL 74.619 IN
END TEMP 73.143 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:49	73.130	25500.97
8:49	73.132	25503.64
9:49	73.134	25498.58
10:49	73.136	25498.52
11:49	73.137	25492.45
12:49	73.139	25499.42
13:49	73.141	25494.20
14:49	73.143	25495.04

SLOPE -0.548 GAL/HR
SLOPE LOW -0.627 GAL/HR
SLOPE HIGH -0.469 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/09/02 7:58

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/09/01
LAST DELIVERY 0:19
LAST DELIVERY 2007/08/30
GROSS CAPACITY 51.0%
BEGIN GROSS 10208.1 GAL
BEGIN NET 10143.3 GAL
BEGIN LEVEL 60.395 IN
BEGIN TEMP 73.951 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/09/02
END GROSS 10209.1 GAL
END NET 10144.4 GAL
END LEVEL 60.399 IN
END TEMP 73.940 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	73.949	19257.61
1:58	73.947	19254.59
2:58	73.946	19258.69
3:58	73.945	19263.04
4:58	73.943	19251.66
5:58	73.942	19265.25
6:58	73.940	19260.42
7:58	73.940	19263.43

SLOPE 0.839 GAL/HR
SLOPE LOW 0.750 GAL/HR
SLOPE HIGH 0.927 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/09/02 7:59

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/09/01
LAST DELIVERY 0:19
LAST DELIVERY 2007/08/30
GROSS CAPACITY 45.8%
BEGIN GROSS 9176.2 GAL
BEGIN NET 9119.4 GAL
BEGIN LEVEL 55.578 IN
BEGIN TEMP 73.854 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 7:58
END DATE 2007/09/02
END GROSS 9176.9 GAL
END NET 9119.1 GAL
END LEVEL 55.581 IN
END TEMP 73.838 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	73.852	19257.61
1:58	73.849	19254.59
2:58	73.847	19258.69
3:58	73.845	19263.04
4:58	73.843	19251.66
5:58	73.841	19265.25
6:58	73.840	19260.42
7:58	73.838	19263.43

SLOPE 0.839 GAL/HR
SLOPE LOW 0.750 GAL/HR
SLOPE HIGH 0.927 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/09/02 2:49

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 23:59
TEST STARTED 2007/09/01
LAST DELIVERY 10:48
LAST DELIVERY 2008/01/21
GROSS CAPACITY 21.8%
BEGIN GROSS 1365.1 GAL
BEGIN NET 1356.2 GAL
BEGIN LEVEL 25.667 IN
BEGIN TEMP 74.336 F
BEGIN WATER 0.1 GAL
BEGIN WATER 0.029 IN
END TIME 2:48
END DATE 2007/09/02
END GROSS 1365.1 GAL
END NET 1356.2 GAL
END LEVEL 25.668 IN
END TEMP 74.342 F
END WATER 0.1 GAL
END WATER 0.029 IN

HOURLY DATA

TIME	DEG F	GAL
0:58	74.338	1356.24
1:58	74.341	1356.23

SLOPE 0.002 GAL/HR
SLOPE LOW 0.000 GAL/HR
SLOPE HIGH 0.004 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/12/03 14:48

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 6:47
TEST STARTED 2007/12/03
LAST DELIVERY 5:01
LAST DELIVERY 2007/11/30
GROSS CAPACITY 50.4%
BEGIN GROSS 10102.9 GAL
BEGIN NET 10114.8 GAL
BEGIN LEVEL 59.904 IN
BEGIN TEMP 57.411 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 14:47
END DATE 2007/12/03
END GROSS 10103.3 GAL
END NET 10115.1 GAL
END LEVEL 59.906 IN
END TEMP 57.425 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:47	57.410	21342.58
8:47	57.416	21342.88
9:47	57.415	21342.91
10:47	57.417	21343.03
11:47	57.420	21342.95
12:47	57.423	21343.05
13:47	57.425	21342.97
14:47	57.425	21342.98

SLOPE 0.035 GAL/HR
SLOPE LOW 0.033 GAL/HR
SLOPE HIGH 0.036 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/12/03 14:47

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 6:47
TEST STARTED 2007/12/03
LAST DELIVERY 5:01
LAST DELIVERY 2007/11/30
GROSS CAPACITY 56.0%
BEGIN GROSS 11211.5 GAL
BEGIN NET 11227.9 GAL
BEGIN LEVEL 65.084 IN
BEGIN TEMP 56.776 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 14:47
END DATE 2007/12/03
END GROSS 11211.5 GAL
END NET 11227.8 GAL
END LEVEL 65.084 IN
END TEMP 56.786 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:47	56.776	21342.71
8:47	56.777	21342.98
9:47	56.779	21342.87
10:47	56.781	21343.00
11:47	56.781	21342.97
12:47	56.781	21342.90
13:47	56.785	21343.09
14:47	56.786	21342.85

SLOPE 0.035 GAL/HR
SLOPE LOW 0.033 GAL/HR
SLOPE HIGH 0.036 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/12/03

9:58

LEAK TEST REPORT

TANK 3 6260.8 GAL
30 WT OIL

LEAK TEST 0.100 GPH
LEAK THRESHOLD 0.050 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 6:47
TEST STARTED 2007/12/03
LAST DELIVERY 15:14
LAST DELIVERY 2007/09/26
GROSS CAPACITY 39.2%
BEGIN GROSS 2451.6 GAL
BEGIN NET 2451.3 GAL
BEGIN LEVEL 39.370 IN
BEGIN TEMP 60.263 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 9:57
END DATE 2007/12/03
END GROSS 2451.5 GAL
END NET 2451.3 GAL
END LEVEL 39.370 IN
END TEMP 60.238 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
7:47	60.264	2451.31
8:47	60.255	2451.25
9:47	60.242	2451.25

SLOPE -0.015 GAL/HR
SLOPE LOW -0.017 GAL/HR
SLOPE HIGH -0.014 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/12/02 10:26

ALARM REPORT

2007/12/02 10:26
POWER DOWN

2007/12/02 10:27
POWER UP

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/12/02 15:17

ALARM REPORT

2007/12/02 15:16
POWER DOWN

2007/12/02 15:16
POWER UP

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/12/02 19:14

ALARM REPORT

2007/12/02 19:13
POWER DOWN

2007/12/02 19:13
POWER UP

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/12/01 3:11

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2007/12/01
LAST DELIVERY 15:14
LAST DELIVERY 2007/09/26
GROSS CAPACITY 42.4%
BEGIN GROSS 2652.8 GAL
BEGIN NET 2651.8 GAL
BEGIN LEVEL 41.795 IN
BEGIN TEMP 60.867 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 3:10
END DATE 2007/12/01
END GROSS 2652.8 GAL
END NET 2651.9 GAL
END LEVEL 41.795 IN
END TEMP 60.820 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:00	60.853	2651.82
2:00	60.842	2651.81
3:00	60.825	2651.83

SLOPE 0.018 GAL/HR
SLOPE LOW 0.017 GAL/HR
SLOPE HIGH 0.020 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2007/12/01 7:13

ALARM REPORT

2007/12/01 7:12
POWER DOWN

2007/12/01 7:12
POWER UP

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/01/01 8:01

LEAK TEST REPORT

TANK 2 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2008/01/01
LAST DELIVERY 19:09
LAST DELIVERY 2007/12/29
GROSS CAPACITY 35.3%
BEGIN GROSS 7069.8 GAL
BEGIN NET 7093.8 GAL
BEGIN LEVEL 45.626 IN
BEGIN TEMP 52.541 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 8:00
END DATE 2008/01/01
END GROSS 7966.5 GAL
END NET 7992.1 GAL
END LEVEL 49.895 IN
END TEMP 52.941 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:00	52.552	18146.98
2:00	52.569	18146.98
3:00	52.577	18146.87
4:01	52.589	18147.30
5:00	52.604	18147.11
6:00	52.614	18147.22
7:00	52.622	18147.45
8:00	52.941	18154.44

SLOPE 0.191 GAL/HR
SLOPE LOW 0.169 GAL/HR
SLOPE HIGH 0.213 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/01/01 8:01

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2008/01/01
LAST DELIVERY 19:09
LAST DELIVERY 2007/12/29
GROSS CAPACITY 55.0%
BEGIN GROSS 11014.0 GAL
BEGIN NET 11053.4 GAL
BEGIN LEVEL 64.159 IN
BEGIN TEMP 52.124 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 8:00
END DATE 2008/01/01
END GROSS 10126.6 GAL
END NET 10162.4 GAL
END LEVEL 60.015 IN
END TEMP 52.221 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:00	52.128	18146.98
2:00	52.143	18146.98
3:00	52.154	18146.87
4:01	52.164	18147.30
5:00	52.176	18147.11
6:00	52.183	18147.22
7:00	52.188	18147.45
8:00	52.221	18154.44

SLOPE 0.191 GAL/HR
SLOPE LOW 0.169 GAL/HR
SLOPE HIGH 0.213 GAL/HR
TEST RESULT INCREASE
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/01/01 2:31

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2008/01/01
LAST DELIVERY 15:14
LAST DELIVERY 2007/09/26
GROSS CAPACITY 13.2%
BEGIN GROSS 824.8 GAL
BEGIN NET 826.5 GAL
BEGIN LEVEL 17.997 IN
BEGIN TEMP 55.208 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 2:30
END DATE 2008/01/01
END GROSS 824.8 GAL
END NET 826.6 GAL
END LEVEL 17.998 IN
END TEMP 55.194 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:00	55.210	826.59
2:00	55.196	826.59

SLOPE 0.002 GAL/HR
SLOPE LOW -0.000 GAL/HR
SLOPE HIGH 0.003 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/03/01 8:00

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2008/03/01
LAST DELIVERY 15:47
LAST DELIVERY 2008/02/28
GROSS CAPACITY 44.2%
BEGIN GROSS 8849.7 GAL
BEGIN NET 8865.9 GAL
BEGIN LEVEL 54.050 IN
BEGIN TEMP 55.980 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 8:00
END DATE 2008/03/01
END GROSS 8849.1 GAL
END NET 8866.0 GAL
END LEVEL 54.047 IN
END TEMP 55.788 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:00	55.956	18012.74
2:00	55.928	18012.93
3:00	55.901	18013.00
4:00	55.879	18013.10
5:00	55.852	18013.06
6:00	55.828	18013.01
7:00	55.806	18013.02
8:00	55.788	18012.87

SLOPE 0.026 GAL/HR
SLOPE LOW 0.024 GAL/HR
SLOPE HIGH 0.029 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/03/01

8:01

LEAK TEST REPORT

TANK 2

20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2008/03/01
LAST DELIVERY 15:47
LAST DELIVERY 2008/02/28
GROSS CAPACITY 45.6%
BEGIN GROSS 9131.5 GAL
BEGIN NET 9146.6 GAL
BEGIN LEVEL 55.368 IN
BEGIN TEMP 56.347 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 8:00
END DATE 2008/03/01
END GROSS 9130.9 GAL
END NET 9146.9 GAL
END LEVEL 55.366 IN
END TEMP 56.144 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:00	56.321	18012.74
2:00	56.296	18012.93
3:00	56.269	18013.00
4:00	56.245	18013.10
5:00	56.221	18013.06
6:00	56.196	18013.01
7:00	56.171	18013.02
8:00	56.144	18012.87

SLOPE 0.026 GAL/HR
SLOPE LOW 0.024 GAL/HR
SLOPE HIGH 0.029 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/03/01

3:10

LEAK TEST REPORT

TANK 3

6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2008/03/01
LAST DELIVERY 8:29
LAST DELIVERY 2008/01/17
GROSS CAPACITY 61.0%
BEGIN GROSS 3821.3 GAL
BEGIN NET 3832.0 GAL
BEGIN LEVEL 55.776 IN
BEGIN TEMP 53.852 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME 3:10
END DATE 2008/03/01
END GROSS 3821.3 GAL
END NET 3832.0 GAL
END LEVEL 55.776 IN
END TEMP 53.855 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:00	53.854	3832.00
2:00	53.854	3832.01
3:00	53.855	3831.99

SLOPE -0.000 GAL/HR
SLOPE LOW -0.002 GAL/HR
SLOPE HIGH 0.001 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/02/01 3:11

LEAK TEST REPORT

TANK 3 6260.8 GAL

30 WT OIL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2008/02/01
LAST DELIVERY 8:29
LAST DELIVERY 2008/01/17
GROSS CAPACITY 77.3%
BEGIN GROSS 4840.3 GAL
BEGIN NET 4839.5 GAL
BEGIN LEVEL 68.593 IN
BEGIN TEMP 60.338 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME
END DATE 2008/02/01
END GROSS 4840.1 GAL
END NET 4839.5 GAL
END LEVEL 68.590 IN
END TEMP 60.246 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:01	60.321	4839.52
2:00	60.281	4839.65
3:00	60.247	4839.56

SLOPE 0.026 GAL/HR
SLOPE LOW 0.023 GAL/HR
SLOPE HIGH 0.029 GAL/HR
TEST RESULT PASSED
SLOPE EQUALS CALCULATED
LEAK RATE

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2008/02/01 8:01

LEAK TEST REPORT

TANK 1 20032.7 GAL

DIESEL

LEAK TEST 0.200 GPH
LEAK THRESHOLD 0.100 GPH
CONFIDENCE LEVEL 99.0%
TEST STARTED 0:01
TEST STARTED 2008/02/01
LAST DELIVERY 22:14
LAST DELIVERY 2008/01/28
GROSS CAPACITY 80.8%
BEGIN GROSS 16180.4 GAL
BEGIN NET 16259.4 GAL
BEGIN LEVEL 89.596 IN
BEGIN TEMP 49.239 F
BEGIN WATER 0.0 GAL
BEGIN WATER 0.000 IN
END TIME
END DATE 2008/02/01
END GROSS 11274.3 GAL
END NET 11328.6 GAL
END LEVEL 65.379 IN
END TEMP 49.326 F
END WATER 0.0 GAL
END WATER 0.000 IN

HOURLY DATA

TIME	DEG F	GAL
1:01	49.237	28605.33
2:00	49.236	28605.27
3:00	49.235	28605.31
4:00	49.296	26275.88
5:00	49.322	23403.09
6:00	49.325	23392.65
7:00	49.330	23392.13
8:00	49.326	23392.37

SLOPE -967.122 GAL/HR
SLOPE LO -983.997 GAL/HR
SLOPE HI -950.247 GAL/HR
TEST RESULT FAILED
SLOPE EQUALS CALCULATED
LEAK RATE

LEAK RATE
SLOPE EQUALS CALCULATED
TEST RESULT FAILED
SLOPE HI -950.247 GAL/HR
SLOPE LO -983.997 GAL/HR
SLOPE -967.122 GAL/HR
DEG F GAL
50.809 28605.33
50.812 28605.27
50.817 28605.31
50.816 26275.88
50.813 23403.09
50.689 23392.65
50.651 23392.13
50.655 23392.37

HOURLY DATA

TIME	DEG F	GAL
1:01	50.809	28605.33
2:00	50.812	28605.27
3:00	50.817	28605.31
4:00	50.816	26275.88
5:00	50.813	23403.09
6:00	50.689	23392.65
7:00	50.651	23392.13
8:00	50.655	23392.37

TANK 2
20032.7 GAL
LEAK TEST REPORT
2008/02/01
8:01

FOSS MARITIME
9030 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631



Pike's Unlimited
3258 Cascade Hwy NE
Silverton, OR 97381

503- 873-8070
Fax: 503-873-4139
Cell: 503-3029144

Email:pike'sunlimited@yahoo.com

Tax Registration #: BIN 123627-5

Bill To:

FOSS MARITIME
~~P.O. BOX 88048~~
Portland, Or 97282-8848

Ship To:

Site address, tested
9030 NW St. Helens Road (97231)
Portland, Or

Invoice

Invoice No: 11
Date: 7/13/2006
Terms: Net 10
Due Date: 7/23/2006
Order No:
Territory:
Sales Person:

PO# 523570

Ship Date 5/23/2006 Ship Via <shipvia> Tracking No <tracking number> FOB <shipping_fob>

Code	Description	Qty/Hours	Rate	Amount
	Line Compliance Test	3.00	\$175.00	\$525.00
	Line Leak Detector Test	2.00	\$50.00	\$100.00
	ATG 3ed Party Certification	1.00	\$100.00	\$100.00
	DEQ Inspection review	1.00	\$350.00	\$350.00
	as built and cp check.	1.50	\$75.00	\$112.50
	Install galvanic system piping	1.00	\$900.00	\$900.00
	DEQ NO show	1.00	\$25.00	\$25.00
	SSN # [REDACTED] Jeff Pike	1.00	\$0.00	\$0.00

* Indicates non-taxable item

We appreciate your business.

Subtotal	\$2,112.50
Tax (0.00%)	\$0.00
Shipping	\$0.00
Total	\$2,112.50
Deposit	\$0.00
Balance Due	\$2,112.50

STATE OF OREGON
Department of Agriculture
MEASUREMENT STANDARDS DIVISION
635 Capitol Street NE
Salem, Oregon 97301-2532



BULK PETROLEUM METER REPORT

Form 2044 Rev. 2/02

L.A. ☐
COL. ☐
Retest ☒

Date 11-23-05		Time 8:30 AM		Duration 1.6	
Firm Name Foss Maritime Co.		License Status A	Number Issued 2G	Number Required 2G	Number Tested 1G
Mailing Address 660 W Ewing St		Firm Number 110797		License Number 86664G	
City / State / Zip Code Seattle WA 98119		County No. 99		Operator / Corporation Name	
Device Location 9030 NW St. Helens Rd		Previous Firm Name			
City / State / Zip Code Portland OR 97203		County No. 26		Seasonal Months: b	
		Phone Number			

EQUIPMENT DESCRIPTION	Type of Inspection (1-10)	1	2	3	4	5	6
Vehicle Identification No.		102					
Meter Make		TORCH					
Meter Serial Number		1437128					
Meter Capacity		120/24					
Register Serial Number		0505725713					
Product(s) Metered		0.2, 2.4					
License Type		F					
Totalizer End		148252.4					
Totalizer Start		14813.8					
Total Returned		116					
Prover Size in Gal. / Lines		100					
TEST RESULTS in Cubic Inches	1	425	N				
	2						
N= Normal	3	Pinch					
S= Special	4	02					
A= Air Eliminator	5						
X= Adjusted Reading	6	Retest					
	7						
Device Correct		Yes					
Correction Required							
Days For Repair		04					
Repair Tag No.	* Rej. Code						

REMARKS: Clear RND 64350

10/02

Department Representative: G. Linn	Operator Copy Received By: [Signature]
For Information By Phone: SALEM (503) 986-4670 / FAX: (503) 986-4734 / TDD Hearing Impaired: (503) 986-4762	
* REJECTION CODES ON REVERSE SIDE	
White Report Page = OFFICE	Yellow Report Page = INSPECTOR
Pink Report Page = OPERATOR	

POSTED:
No ☐ Yes ☒



BULK PETROLEUM METER REPORT

Form 2044 Rev. 9/02

L.A.
COL.
Retest

Firm Name <i>Foss Maritime Co.</i>		Date <i>5-24-05</i>	Time <i>1:15</i>	AM <i>PM</i>	Duration <i>1-5</i>
Mailing Address <i>660 W Ewing St.</i>		License Status <i>A</i>	Number Issued <i>26</i>	Number Required <i>26</i>	Number Tested <i>26</i>
City / State / Zip Code <i>Seattle WA 98119</i>		Firm Number <i>110797</i>	License Number <i>866646</i>		
Device Location <i>9030 NW St. Helens Rd</i>		Operator / corporation Name			
City / State / Zip Code <i>Portland OR 97203</i>		Previous Firm Name			
County No. <i>26</i>		Seasonal Months: <i>to</i>		Phone Number	

EQUIPMENT DESCRIPTION	Type of Inspection (1-10)	Top 1	2	Bottom 2	3	4	5	6
Vehicle Identification No.		<i>Dodge</i>	<i>Dodge</i>					
Meter Make		<i>Torchon</i>	<i>Torchon</i>					
Meter Serial Number		<i>1435731</i>	<i>1437928</i>					
Meter Capacity		<i>125/24</i>	<i>120/24</i>					
Register Serial Number		<i>145951</i>	<i>167110</i>					
Product(s) Metered		<i>Diesel</i>	<i>Diesel</i>					
License Type		<i>E</i>	<i>E</i>					
Totalizer End		<i>4126232</i>	<i>899755.25</i>					
Totalizer Start		<i>4126117</i>	<i>899734.3</i>					
Total Returned		<i>115</i>	<i>215</i>					
Prover Size in Gal. / Litres		<i>100</i>	<i>100</i>					
TEST RESULTS in Cubic Inches	1	<i>-50</i>	<i>N</i>	<i>+50</i>	<i>N</i>			
	2							
N= Normal	3			<i>Print 115.116</i>				
S= Special	4			<i>Print 120.131</i>				
A= Air Eliminator	5							
X= Adjusted Reading	6	<i>5923</i>	<i>5924</i>					
	7	<i>6/20</i>	<i>02</i>	<i>6/20</i>				
Device Correct		<i>YES</i>	<i>NO</i>	<i>0</i>				
Correction Required			<i>Printer Error</i>					
Days For Repair		<i>020</i>	<i>15</i>					
Repair Tag No.	* Rej. Code		<i>R-64350</i>	<i>25</i>				

REMARKS: *(*) Bottom meter Printer Error*
Please correct within 15 days.

Department Representative: *G. Lowe* Operator Copy Received By: *74 M. (Signature)*

For Information By Phone: SALEM (503) 986-4670 / FAX: (503) 986-4734 / TDD Hearing Impaired: (503) 986-4762
* REJECTION CODES ON REVERSE SIDE

White Report Page = OFFICE Yellow Report Page = INSPECTOR Pink Report Page = OPERATOR

REJECTION CODES**Tolerance**

1. Tolerance-maintenance
2. Tolerance-acceptance
3. Tolerance-decreasing load test
4. Tolerance-shift/section test
5. Tolerance-more than 50% of devices at location with minus errors in favor of the operator
6. Tolerance-more than 50% of devices of specific grade with minus error in favor of the operator

Computer / Register / Indicator

7. Components-burned out in customer/operators display
8. Computed price error
9. Computer/Register-advances when turned on
10. Glass-broken/missing
11. Indications-customer and operator do not agree
12. Indications-customer view obscured
13. Indications-device and remote do not agree
14. Indications-does not repeat
15. Indications-start other than zero
16. Indicator-does not return to zero
17. Indicator-missing/broken
18. Indicator-needs to be adjusted
19. Register head not legal
20. Unit price error

Hose / Nozzle

21. Anti drain valve-defective
22. Back flow protection-inadequate
23. Diversion Of Measured Liquid-two hoses down stream from meter
24. Hose-defective/leaking

Printer

25. Printer error
26. Receipt/Ticket-incomplete/incorrect information

REJECTION CODES**Identification**

27. Alcohol labeling-missing/incorrect
28. Identification plate-missing/obliterated
29. Product Identification-missing/incorrect product identification
30. Storage tanks-not properly identified

Security Seal

31. Security Seal-broken or missing
32. Security Seal-no provision for sealing adjustable mechanism

Meters

33. Air eliminator-defective
34. Control valve-defective
35. Flow rate-Exceeds manufacture rate capacity
36. Temperature compensator-defective
37. Thermometer well-missing unable to test
38. Vapor eliminator-defective
39. Vapor return valve-missing unable to test
40. Zero set back interlock-defective

Weighing Devices

41. Customer-Weight display missing
42. Interference-live parts are not free from interference
43. Level-not maintained in level condition
44. Supports/mountings-inadequate
45. Weighing Operation-weighing operation obscured
46. Weighing platform-has insufficient clearance
58. Scale capacity, section capacity and/or concentrated load capacity not identified

Weighing/Measuring Devices

47. Accessibility-not accessible for testing
48. Class markings missing/incorrect
49. Device does not operate properly-unable to test
50. Device not safe for testing
51. Legal for trade-device not legal for trade
52. Licensing
53. Off and On Switch-defective
54. Other: see hand written remarks
- 55.
56. Suitability-not suitable for intended use
57. Supports/mountings-inadequate



BULK PETROLEUM METER REPORT

Form 2044 Rev. 9/02

L.A.
COL.
Retest

Firm Name FOSS MAR-TIME Co.		Date 5-17-04	Time 1:30	AM PM	Duration 1.0
Mailing Address 660 W. Ewing St.		License Status A	Number Issued 26	Number Required 26	Number Tested 26
City / State / Zip Code Seattle WA 98114		Firm Number 110797	License Number 866646		
County No. 99		Operator / corporation Name			
Device Location 9030 NW 55. Holmes Rd		Previous Firm Name			
City / State / Zip Code Portland OR 97203		Seasonal Months: b		Phone Number	
County No. 26					

EQUIPMENT DESCRIPTION	Type of Inspection (1-10)	1	2	3	4	5	6
Vehicle Identification No.		TOP	Bottom				
Meter Make		Tokem	Tokem				
Meter Serial Number		35731	37928				
Meter Capacity		125/24	120/24				
Register Serial Number		145951	167110				
Product(s) Metered		Gasoline	Diesel				
License Type		G	G				
Totalizer End		/	/				
Totalizer Start		/	/				
Total Returned		210	110				
Prover Size in Gal. / Liters		100	100				
TEST RESULTS in Cubic Inches	1	Prime	N	725	N		
	2	-50	N				
N= Normal	3						
S= Special	4						
A= Air Eliminator	5						
X= Adjusted Reading	6						
	7	LTW 02	LTW 02				
Device Correct		YES	YES				
Correction Required		/	/				
Days For Repair		02	02				
Repair Tag No.	* Rej. Code						

REMARKS:

26/02

Department Representative: G. Lowe	Operator Copy Received By: [Signature]
--	--

For Information By Phone: SALEM (503) 986-4670 / FAX: (503) 986-4734 / TDD Hearing Impaired: (503) 986-4762

* REJECTION CODES ON REVERSE SIDE

POSTED:

No ☐ Yes ☐

White Report Page = OFFICE

Yellow Report Page = INSPECTOR

Pink Report Page = OPERATOR

REJECTION CODES

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1. Tolerance-maintenance
2. Tolerance-acceptance
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12. Indications-customer view obscured
13. Indications-device and remote do not agree
14. Indications-does not repeat
15. Indications-start other than zero
16. Indicator-does not return to zero
17. Indicator-missing/broken
18. Indicator-needs to be adjusted
19. Register head not legal
20. Unit price error

Hose / Nozzle

21. Anti drain valve-defective
22. Back flow protection-inadequate
23. Diversion Of Measured Liquid-two hoses down stream from meter
24. Hose-defective/leaking

Printer

25. Printer error
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REJECTION CODES

Identification

27. Alcohol labeling-missing/incorrect
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29. Product Identification-missing/incorrect product identification
30. Storage tanks-not properly identified

Security Seal

31. Security Seal-broken or missing
32. Security Seal-no provision for sealing adjustable mechanism

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51. Legal for trade-device not legal for trade
52. Licensing
53. Off and On Switch-defective
54. Other: see hand written remarks
- 55.
56. Suitability-not suitable for intended use
57. Supports/mountings-inadequate



Oregon

Theodore R. Kulongoski, Governor

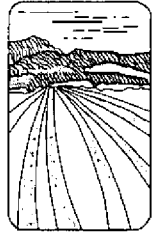
*Received
2/22/05*

Department of Agriculture

635 Capitol Street NE
Salem, OR 97301-2532

February 10, 2005

g-t



FOSS MARITIME CO
660 W EWING ST
SEATTLE WA 98119-1587

RE: Petroleum Meter Calibration Equipment

Recently we have had questions brought to our attention regarding types of certification equipment and certification intervals of equipment used to test and calibrate high-flow petroleum meters commonly used on loading terminals, jobber loading racks, and delivery trucks.

All graduated neck type large volumetric measures (100 gallon nominal capacity or larger) must meet National Institute of Standards and Technology (NIST) Handbook 105-3 requirements and be certified at least once every two years by a state or accredited NIST recognized traceable metrology laboratory. Prior to use, the calibration reports must be sent to the Oregon Department of Agriculture (ODA), Measurement Standards Division.

All dynamic small volume provers must meet NIST Handbook 105-7 requirements and, once it has met its initial verification interval, be certified at least once every two years by a state or accredited NIST recognized traceable metrology laboratory with certification credentials for dynamic small volume provers. Suitable test facilities and traceability must be established prior to use of a dynamic small volume prover. Prior to use, the calibration reports must be sent to the ODA Measurement Standards Division.

If any security seals are broken or meters are calibrated, then the ODA Measurement Standards Division must be notified in writing within 24 hours. This documentation must include the meter make and serial number, the calibration factors before and after adjustments, and all appropriate test results must be included in this documentation.

At the written request of the business's manager, ODA Measurement Standards Division staff may conduct certification examinations in conjunction with service companies. The written request must include the specific date(s) of the tests or the statement "Effective until changed or permission is removed by the approving manager or terminal representative".

Once again, all certification equipment must meet applicable NIST Handbook 105 series requirements, have current calibrations, and calibration reports submitted to the ODA Measurement Standards Division prior to use.

Calibration equipment certification reports and written requests must be mailed to:

Oregon Department of Agriculture
Measurement Standards Division
635 Capitol Street NE
Salem, OR 97301-2532

If you have any questions, please do not hesitate to contact the ODA Measurement Standards Division at 503-986-4670.

TANK LEAK DETECTION

THIS SECTION SHOULD CONTAIN, BUT IS NOT LIMITED TO THE FOLOWING:

- DESCRIPTION OF THE METHOD OF LEAK DETECTION USED AT THE SITE, DATE INSTALLED OR INITIATED AND ANY OTHER PERTINENT DATA (INSTALLER, PERMITS, ETC.)
- MANUAL, INSTRUCTIONS, OR METHOD OUTLINE
- THIRD PARTY CERTIFICATION
- ANNUAL MONITOR INSPECTION/CERTIFICATION
- O & M SCHEDULE AND REPORTS FOR METHOD USED
- MONTHLY REPORTS
- TESTING
- OTHER INFORMATION AS NECESSARY

Inventory reconciliation ok Now untill 2008
Statistical Inventory reconciliation (3rd party certified
(SIR) Tank gauging)

Automatic gauges must do .2 GPH test on each tank
monthly. This must be kept for 12 months
This is by a 3rd party tank gauge

*U² In con - scald ?? 3rd party certs. For max
thru-put of tanks Incon.com for more info

Interstitial
~~Interstitial~~ monitors space between walls of
Double wall tanks.

A. GENERAL REQUIREMENTS FOR PETROLEUM USTS

- An appropriate primary release detection method for the UST system (OAR 340-150-0420 through 340-150-0470) must be selected. More than one method may be in use at an UST facility, but only one can be the primary method.
- The primary method must be reported to the Department when an UST is installed or during an inspection by the Department. [For example, the primary release detection method cannot be switched from month to month depending on which method passes daily or monthly monitoring requirements. The primary method of release detection can be changed to another method as necessary as part of a repair, modification or replacement, or if the period of use for a method has expired by rule.]
- A method of release detection for petroleum UST systems must be provided that:
 - Can detect a release from any portion of the UST and the underground piping that routinely contains a regulated substance.
 - Is an approved leak detection method/equipment as listed by a national organization (e.g., the National Work Group on Leak Detection).
 - Is installed, calibrated, operated and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition.
 - Meets the performance requirements of 340-150-0410 for underground piping, including any manufacturer performance claims (with the method for determining compliance with performance claims described in writing by the equipment manufacturer or installer).
 - Is capable of detecting the leak rate or quantity specified for that method in OAR 340-150-0450 through 340-150-0470 or 340-150-0410 for piping, with a 95-percent probability of detection and a 5-percent probability of false alarm. Release detection methods permanently installed before December 22, 1990 are exempt from the requirements of this subsection.
- When a release detection method indicates a release may have occurred, the Department must be notified of a suspected release in accordance with OAR 340-150-0500.
- Records must be maintained that demonstrate compliance with all applicable requirements and the following records must be retained for as long as the release detection equipment is in use:
 - All written performance claims pertaining to any release detection system used and the third-party evaluation and approval.
 - The results of any sampling, equipment testing, or monitoring.
 - Written documentation of all calibration, maintenance and repair of release detection equipment permanently located on-site, including any schedules of required calibration and maintenance provided by the release detection equipment manufacturer.
- The permittee must keep release detection records either at the UST facility and immediately available for inspection by the Department or available for inspection at a readily available alternative site.
- The codes and standards listed in *Appendix I of Division 150* may be used to comply with release detection requirements.

MONITORING SYSTEM CERTIFICATION

This form is used to document the testing and servicing of monitoring equipment. A separate certification must be prepared for each monitoring system control panel. A copy of this form must be kept by the tank system owner/operator and available to the DEQ upon request.

A. General Information

Facility Name: _____ Bldg No. _____
Site Address: _____ City: _____ Zip: _____
Contact Person: _____ Phone: _____
Make/Model of Monitoring System: _____ Date: _____

B. Inventory of Equipment Tested/Certified

Tank ID: _____ ____ In-Tank Gauging Probe. Model: _____ ____ Annular Space/Vault Sensor Model: _____ ____ Piping Sump/Trench Sensors Model: _____ ____ Fill Sump Sensors Model: _____ ____ Mechanical Line Leak Detector Model: _____ ____ Electronic Line Leak Detector Model: _____ ____ Tank Overfill/High Level Sensor Model: _____ ____ Other _____	Tank ID: _____ ____ In-Tank Gauging Probe Model: _____ ____ Annular Space/Vault Sensor Model: _____ ____ Piping Sump/Trench Sensors Model: _____ ____ Fill Sump Sensors Model: _____ ____ Mechanical Line Leak Detector Model: _____ ____ Electronic Line Leak Detector Model: _____ ____ Tank Overfill/High Level Sensor Model: _____ ____ Other _____
Tank ID: _____ ____ In-Tank Gauging Probe. Model: _____ ____ Annular Space/Vault Sensor Model: _____ ____ Piping Sump/Trench Sensors Model: _____ ____ Fill Sump Sensors Model: _____ ____ Mechanical Line Leak Detector Model: _____ ____ Electronic Line Leak Detector Model: _____ ____ Tank Overfill/High Level Sensor Model: _____ ____ Other _____	Tank ID: _____ ____ In-Tank Gauging Probe Model: _____ ____ Annular Space/Vault Sensor Model: _____ ____ Piping Sump/Trench Sensors Model: _____ ____ Fill Sump Sensors Model: _____ ____ Mechanical Line Leak Detector Model: _____ ____ Electronic Line Leak Detector Model: _____ ____ Tank Overfill/High Level Sensor Model: _____ ____ Other _____
Dispenser ID: _____ ____ Dispenser Containment Sensors Model _____ ____ Shear Valve(s) _____ ____ Dispenser Containment Float(s) and Chain(s) _____	Dispenser ID: _____ ____ Dispenser Containment Sensors Model _____ ____ Shear Valve(s) _____ ____ Dispenser Containment Float(s) and Chain(s) _____
Dispenser ID: _____ ____ Dispenser Containment Sensors Model _____ ____ Shear Valve(s) _____ ____ Dispenser Containment Float(s) and Chain(s) _____	Dispenser ID: _____ ____ Dispenser Containment Sensors Model _____ ____ Shear Valve(s) _____ ____ Dispenser Containment Float(s) and Chain(s) _____
Dispenser ID: _____ ____ Dispenser Containment Sensors Model _____ ____ Shear Valve(s) _____ ____ Dispenser Containment Float(s) and Chain(s) _____	Dispenser ID: _____ ____ Dispenser Containment Sensors Model _____ ____ Shear Valve(s) _____ ____ Dispenser Containment Float(s) and Chain(s) _____

Certification – I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturers guidelines, and that the documentation necessary to verify the above information has been reviewed and is correct.

Technician Name (print): _____ Signature: _____

CONTRACT ENVIRONMENTAL SERVICE
2005 S.W. 198th Ave.
Aloha, OR 97006
503/259-2961

D. Results of Testing/Serviceing.

Software Version Installed: _____

Complete the following checklist:

YES*	NO*	N/A	
			Is the audible alarm operational?
			Is the visual alarm operational?
			Were all sensors visually inspected, functionally tested, and confirmed operational?
			Were all sensors installed at the lowest point of secondary containment and positioned so that other equipment will not interfere with their proper operation?
			For pressurized piping systems, does the turbine automatically shut down if the piping secondary containment monitoring system detects a lead, fails to operate, or is electrically disconnected?
			Was positive shut-down confirmed?
			For tank systems that utilize the monitoring system as the primary tank overflow warning device, is the overflow warning alarm audible at the tank fill point(s) and operating properly?
			Is the overflow alarm set at 90% or less?
			Was any monitoring equipment replaced?
			Was liquid found in any secondary containment systems designed as dry systems?
			Was monitoring system set-up reviewed to ensure proper settings?
			Is all monitoring equipment operational per manufacturer's specifications?

E. In-Tank gauging / SIR Equipment:

- ☐ Check this box if tank gauging is used only for inventory control.
☐ Check this box if no tank gauging or SIR is installed.

YES	NO*	
		Has all input wiring been inspected for proper entry and termination, including testing for ground faults?
		Were all tank gauging probes visually inspected for damage and residue buildup?
		Was accuracy of system product level readings tested?
		Was accuracy of system water level readings tested?
		Were all probes properly reinstalled?
		Were all items on the equipment manufacturer's maintenance checklist completed?

F. Line Leak Detectors (LLD):

- ☐ Check this box if LLDs are not installed.

YES	NO*	N/A	
			For equipment start-up or annual equipment certification, was a leak simulated to verify LLD performance? <u>3 g.p.h.</u> ; <u>0.1 g.p.h.</u> ; <u>0.2 g.p.h.</u>
			Were all LLDs confirmed operational and accurate within regulatory requirements?
			Was the testing apparatus properly calibrated?
			For mechanical LLDs, does the LLD restrict product flow if it detects a leak?
			For electronic LLDs, does the turbine automatically shut-off if the LLD detects a leak?
			For electronic LLDs, does the turbine automatically shut-off if any portion of the monitoring system is disabled or disconnected?
			For electronic LLDs, does the turbine shut-off automatically if any portion of the monitoring system malfunctions or fails a test?
			For electronic LLDs, have all accessible wiring connections been visually inspected?
			Were all items on the equipment manufacturers maintenance checklist completed?

*Explain what was replaced and/when deficiencies were or will be corrected below.

Comments:



Petroleum Compliance Services

Date: 9-8-07

Subject: Annual Line test

Attention: Linda Brown

Linda,

System looks good, small leak still in transfer sump it was there last year.

The shut of vales to the dock move real easy, someone could open them by bumping into them.

You might consider changing the handles on them.

I change the name last year taxes information is still the same as well as the address.

Thanks for the work

Jeff Pike



Petroleum Compliance Services
3258 Cascade Hwy NE
Silverton, OR 97381

503- 873-4139
Fax: 503-873-8070
Cell: 503-302-9144

Email: pike'sunlimited@yahoo.com
Tax ID 544-76-25-35
Tax Registration #: BIN 123627-5

Invoice

Invoice No: 111
Date: 9/8/2007
Terms: Net 05
Due Date: 9/13/2007
Order No:
Territory:
Sales Person:

Bill To:

Foss Maritime
9030 NW St helens Road
Portland, Or 97231

Ship To:

Linda Brown
linda@foss.com
503-978-6546
fax 503-735-4976

COPY

Ship Date: 9/8/2007 Ship Via: <shipvia> Tracking No: <tracking number> FOB: <shipping_fob>

Code	Description	Qty/Hours	Rate	Amount
	Annual line test 3 lines	3.00	\$175.00	\$525.00
	Line Leak detectors	2.00	\$50.00	\$100.00
	CP test (no Charge)	1.00	\$0.00	\$0.00

COPY

* Indicates non-taxable item

Subtotal	\$625.00
Tax (0.00%)	\$0.00
Shipping	\$0.00
Total	\$625.00
Deposit	\$0.00
Balance Due	<u>\$625.00</u>

PETROLEUM COMPLIANCE SERVICES LLC

Office 503-873-4139 Fax 503-873-8070

Tank Monitor Annual Third Party Certification

Make INCON

Serial #

Services Performed	PASS	FAIL	N/A
1. Run system Diagnostic check.			
2. Verify setup values and programmable Info.			
3. Verify monitor inventory levels and tank stick readings.			
4. Verify battery back-up.			
5. Test remote communications.			
6. Test overfill alarm for correct operations.			
7. Verify last tank test passed.			

In Tank Probes-Annual Service.

Services Performed	YES	NO	N/A
1. Run probe diagnostic check.			
2. Inspect sensor cables and connections.			
3. Inspect probe floats and probe for residue build-up.			

Sump Sensors-Annual Services

Services Performed	YES	NO	N/A
1. Run sensor diagnostic.			
2. Inspect sensor cables and connections.			
3. Test sensor floats.			
4. Clean and inspect.			

DATE: 9-6-07

Customer; Foss Maritime

Address: 9030 NW St Helens Rd 97231

Technician; Jeff Pike

DEQ Certification# 25892

NOTES: **Third Party to be performed by Mascott Equipment.**

LINE/ TURBINE INFORMATION

Lines ID	Diesel 1 AEFG	Diesel 2 AEFH	Lube Oil AEGN	
1. Piping type: Enviorn (S) Single wall (D) Double wall	D	D	D	
2. Pump Type (T) tribune (S) Suction	T	T	Sin pump	
3. If turbine is Line Leak Detector present (YES) (NO)	Yes	Yes	No	
4. Line shut of at tribune (YES) (NO)	Yes	Yes	Yes	
5. Turbine operating pressure				

VISUAL INSPECTION AND MAINTANCE

	YES	NO	N/A	Comments/Observations
Clean sumps Water/fuel	X			Sumps clean and well maintained.
Visual inspect Exposed Piping	X			Good
Emergency stop Location/working			X	Mascott
ATG cabinet Securely mounted			X	Mascott
Dispensers Secured	X			

DATE: 9-06-07

Customer: Foss Maritime

Site Address: 9030 NW ST Helens RD Portland, Or 97321

Technician: Jeff Pike

DEQ Certification # 25892

NOTES: Lube Oil has no Leak Detector. Sump sensor is used for compliance detection.

DATA CHART FOR USE WITH PETROTITE LIN TESTER

DATE: 9-06-07

Station: Foss Maritime

Site address: 9030 NW St Helens Rd Portland, OR 97321

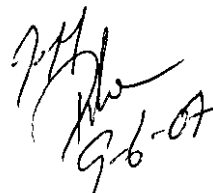
Owner: Foss Maritime

Operator: Foss Maritime

Reason for test: Annual compliance test.

Special instructions; none Testing Company: Petroleum Compliance Services LLC.

Weather: clear	Temp 74	Surface Ac/concrete	Line burial Depth; 3' Length; 40'
----------------	---------	------------------------	--------------------------------------

Identify each Line tested	Time tested AM PM	Pressure Readings		Volume Readings ML			
		Before	After	Before	After	Net change	Bleed Back
Diesel 1 AEFG	Start 9:20	Start 60PSI	60 PSI				
	Finish 10:10	60 PSI	60 PSI			0.00	
Diesel 2 AEFH	Start 10:20	Start 60PSI	60 PSI				
	Finish 10:50	60 PSI	60 PSI			0.00	
Lube Oil AEGN	Start 10:50	Start PSI 50	50 PSI				
	Finish 11:15	50 PSI	50 PSI			0.00	
	Start	Start PSI	PSI				
	Finish	PSI	PSI			0.00	
Test Results 	Line ID		Volume ML				
	PASS/FAIL		Net Change		Date Tested		
	Diesel 1	Pass	zero		9-6-07		
	Diesel 2	Pass	zero		9-6-07		
	Lube Oil	Pass	zero		9-6-07		

The test results indicate the systems condition at the time of testing.

The results do not carry and implied warranty or guaranty of the system after the test date.

MECHANICAL LEAK DETECTORS TEST RESULTS

DATE: 9-6-07

Company Performing: Test Petroleum Compliance Service

Tech: Jeff Pike

Site Name: Foss Maritime

Address: 9030 NW ST Helens RD Portland, Or 97321

Product Type: Diesel 1		
Type of Leak Detector: Red Jacket	SSN#	
Type of line Tested: Environ		
3GPH TEST Results	<u>PASSED</u>	FAILED
Replaced Leak Detector	YES	NO
If Yes Type of new replacement:	SSN#	

Product Type: Diesel 2		
Type of Leak Detector: Red Jacket	SSN#	
Type of Line Tested: Environ		
3 GPH Test Results	<u>PASSED</u>	FAILED
Replaced Leak Detector	YES	NO
If Yes type of new replacement:	SSN#	

Product Type:		
Type of Leak Detector:	SSN#	
Type of Line Tested:		
3 GPH Test Results;	PASSED	FAILED
Replace Leak Detector	Yes	NO
If Yes type of new replacement:	SSN#	

Product Type: Diesel		
Type of Leak Detector:	SSN#	
Type of Line Tested:		
3 GPH Test Results:	PASSED	FAILED
Replaced Leak Detector	Yes	
If Yes type of new replacement:		

Oregon Department of Environmental Quality

Cathodic Protection Test Information Page

UST Owner				UST Facility			
NAME Foss Maritime				NAME: Foss Maritime		ID#:	
ADDRESS: 9030 NW St. Helens Road				ADDRESS: 9030 NW St Helens Road			
CITY: Portland 97231		STATE: OR		CITY: Portland 97231		STATE: OR	
Cathodic Protection Tester							
TESTER'S NAME: Jeff Pike				CP TESTER'S LICENSE #: 26449			
COMPANY NAME: Petroleum Compliance Services				EXPIRATION DATE: 05-25-2009			
ADDRESS: 3258 Cascade Hwy NE				PHONE NUMBER: 503-873-4139			
CITY: Silverton		STATE: OR		NACE CERTIFICATION #: 10096			
Cathodic protection system is: <input type="checkbox"/> Galvanic <input type="checkbox"/> Impressed current Date Last Tested: 2006							
Weather Conditions at Time of Testing/Inspection: Clear							
Temperature: 80 Soil/Backfill Conditions (circle): moist <u>dry</u> sand gravel soil Describe: clay							
Cathodic Protection System Certification							
Identify which of the following testing situations is being recorded:							
<input type="checkbox"/> Test required within 6 months of installation of CP system (installation date was ___/___/___) <input type="checkbox"/> Test required at least every 3 years after installation/test noted above <input type="checkbox"/> Test required within 6 months of any repair activity							
<u>Courtesy Check</u>							
The cathodic protection system is effective, testing was performed according to NACE Standards RP-0285-2002 and TM0101-2001, and is providing cathodic protection to all tanks and product lines: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Signature of Tester				Date: 9-6-07			
UST SYSTEM INFORMATION							
TANK #	YR TANK INSTALLED	CAPACITY	TANK MATERIAL	LINED? Y/N Date	YR CP INSTALLED	PIPING MATERIAL	YR CP INSTALLED
1	Diesel 1		Steel			Environ	
2	Diesel 2		Steel			Environ	
3	Lube Oil					Environ	

UST SITE PLAN – On the back draw a diagram showing the important parts of the facility (tanks, lines, man way locations, turbines, vents, rectifier, pump islands, buildings). Indicate reference cell locations where structure-to-soil potential or continuity measurements have been made and label(R-1, R-2, R-3); location of all anodes and wires; location of CP test stations.

Facility Name: Foss Maritime Test Date: 09-6-07. Facility #

IMPRESSED CURRENT CP TEST RESULTS REPORT PAGE							
RECTIFIER DATA							
RECTIFIER MANUFACTURER: Bench Mark				RATED DC OUTPUT: VOLTS 6.5 AMPS			
RECTIFIER MODEL:				RECTIFIER SERIAL NUMBER:			
RECTIFIER OUTPUT AS INITIALLY DESIGNED OR LAST RECOMMENDED (if available): VOLTS AMPS							
	DATE	TAP SETTINGS		DC OUTPUT		HOUR METER	COMMENTS
		Course	Fine	Volts	AMPS		
"As Found"	9-5-07	C	3	5	5	4424916	
"As Left"	9-5-07	C	3	3.2	3.2	4424916	
STRUCTURE TO SOIL POTENTIAL MEASUREMENTS							
ID	STRUCTURE	CONTACT POINT	REFERENCE CELL LOCATOION	ON	Instant off	100MV POLARIZATION	
						FINAL	CHANGE
D 1	UST	FILL	NEXT TO FILL	-1.222			
D 2	UST	FILL	"	-1.222			
OIL	UST	FILL	"	-1.222			
CP TEST STATION REQUIREMENTS							
Have previous CP system test records been reviewed? yes				Has this CP test been performed consistent with previous CP system tests? yes			
If test procedures have changed since last test please explain.							
Have potential measurements been made at all tanks and piping including any buried flex-connectors? Yes							
COMPLETE IF ANY REPAIRS OR MODIFICATIONS TO THE CP SYSTEM ARE MADE OR ARE NECESSARY							
Complete if any repairs or modifications to the cathodic protection system are made or are necessary.							
<input type="checkbox"/> Additional anodes for an impressed current system (attach corrosion experts design)							
<input type="checkbox"/> Repairs or replacement of rectifier (explain below)							
<input type="checkbox"/> Anode header cables repaired and/or replaced (explain below)							
<input type="checkbox"/> Impressed current protected tanks/piping not electrically continuous (explain)							
Remarks/Other:							

GALVANIC (SACRIFICIAL) CP TEST RESULTS REPORT PAGE**STRUCTURE TO SOIL POTENTIAL MEASUREMENTS**

ID	STRUCTURE	CONTACT POINT	REFERENCE CELL LOCATION	mV	COMMENTS
1	PIPING	PIPE	NEXT TO PIPE	-0.900	
2	PIPING	PIPE	NEXT TO PIPE	-0.900	
3	PIPING	PIPE	NEXT TO PIPE	-0.900	

CP TEST STATION REQUIREMENTS

Have previous CP system test records been reviewed? Yes

Has this CP test been performed consistent with previous CP system tests? Yes

If test procedures have changed since last test please explain:

Have potential measurements been made at all tanks and piping including any buried flex-connectors? N/A

COMPLETE IF ANY REPAIRS OR MODIFICATIONS TO THE CP SYSTEM ARE MADE OR ARE NECESSARY

Describe any repairs or modifications to the cathodic protection system that are made or are necessary.

☐ No repairs modifications are needed.

Jeff Pike



Pike's Unlimited
3258 Cascade Hwy NE
Silverton, OR 97381

503- 873-8070
Fax: 503-873-4139
Cell: 503-3029144

Email:pike'sunlimited@yahoo.com

Tax Registration #: BIN 123627-5

Bill To: ~~FOSS MARITIME~~
~~PO BOX 83048~~
Portland ,Or ~~97383-8048~~

Ship To:
Site address, tested
9030 NW St. Helens Road (97231)
Portland,Or

Invoice

Invoice No: 11
Date: 7/13/2006
Terms: Net 10
Due Date: 7/23/2006
Order No:
Territory:
Sales Person:

PO# 523570

Ship Date: 5/23/2006 Ship Via: <shipvia> Tracking No: <tracking number> FOB: <shipping_fob>

Code	Description	Qty/Hours	Rate	Amount
	Line Compliance Test	3.00	\$175.00	\$525.00
	Line Leak Detector Test	2.00	\$50.00	\$100.00
	ATG 3rd Party Certification	1.00	\$100.00	\$100.00
	DEQ Inspection review	1.00	\$350.00	\$350.00
	as built and op check.	1.50	\$75.00	\$112.50
	Install galvanic system piping	1.00	\$900.00	\$900.00
	DEQ NO show	1.00	\$25.00	\$25.00
	SSN # [REDACTED] Jeff Pike	1.00	\$0.00	\$0.00

* Indicates non-taxable item

We appreciate your business.

Subtotal	\$2,112.50
Tax (0.00%)	\$0.00
Shipping	\$0.00
Total	\$2,112.50
Deposit	\$0.00
Balance Due	\$2,112.50

PIKE'S UNLIMITED, LLC
3258 Cascade Hwy NE Silverton, OR 97381. Office (503) 873-8070, Cell (503) 302-9144
www.pikesunlimited@yahoo.com

Tank Monitor Console-Performed Yearly
Make: INCON TS 1001
Serial #: 55789
DEQ # 25892

Work Performed	N/A	Pass	Fail
1. Run system diagnostic check		X	
2. Print and verify setup values and programmable info		X	
3. verify battery back-up		X	
4. Verify monitor inventory levels and tank stick readings		X	
5. Test remote communications	X		
6. Test external alarm for correct operation		X	
7. Tank test - Date & Time	X		

In Tank Probes - Performed Yearly

Worked Performed	Pass	Fail
1. Run probe diagnostic check	X	
2. Inspect sensor cables and connections	X	
3. Inspect probe floats and probe for any residue build-up	X	

Sensors - Performed Yearly

Work Performed	Pass	Fail
1. Run sensor diagnostic	X	
2. Inspect sensor cables and connections	X	
3. Test sensor float switch for proper alarm response	X	
4. Clean and inspect	X	

Customer: FOSS Maritime

Site Address: 9030 NW ST Helens RD Portland OR 97321

Technician: Jeffery Pike

Date 5-10-2006

Clint: FOSS Maritime
 Site Address: 9030 NW ST Helens RD Portland OR 97231
 Date: 5-10-2006

Monitoring console	Tank Number	Pass	Fail	Comments
Check and print Status of all tanks Attach to report.	T1 Diesel	X		Stick with in limits To TLS slopes and gage.
	T2 Diesel	X		
	T3 Lube Oil	X		

Check and print Sensor status. Attach to report.				12 months of tightness test all passed

	Notes	Yes	No	Comments
Clean sumps Water/fuel	Little dirt. No liquid in sumps	X		NO ACTIVE ALARMS. SYSTEM OK
Visual inspect Exposed piping	No stress noted on piping.	X		
Emergency shut off.	Plane site/ legal height.	X		
Check Paper in Console	Additional replacement rolls on site	X		
Monitoring cabinet Securely mounted		X		

Repairs recommend: NONE

Repairs Performed: NONE

PIKE'S UNLIMITED, LLC.

Technician: Jeff Pike

DATA CHART FOR USE WITHG PETROTITE LINE TESTER

Station Number:

Location: 9030 NW ST Helens Rd 97231

Owner: FOSS Maritime

Operator: Same

Reason for Test: Annual Compliance Test

Test requested by: Linda Brown

Special Instructions: None

Testing Company: PIKE'S UNLIMITED, LLC.

Technician: Jeff Pike

Is a tank test to be

Make and Type of

Made with this line test YES NO (X)Pump or Dispenser (Suction/Submersible)

Weather: clear

Temperature in Tanks 57°F

°C Surface: Concrete. Burial Depth: 3'

IDENTIFY EACH LINE AS TESTED	Time AM PM	Log of test procedures, Ambient temperature, Weather, ETC	Pressure		Volume			Remarks Size, Length , All flexes and piping size and Accounted.
			PSI or kPa		Reading ML			
DIESEL (1) AEFG		Plastic line test Procedures are as	Before	After	Before	After	Net Change	
	10:15	Follows: Pressurize Line to 75 PSI Monitor	65 start		.0786 Start			
	10:30	For 30 MIN. Adjusting Back to 75 After 1"	65	65	.0786	.0786	.0000	
	10:45	15 MIN. Drop to 60 record into scale	65	65	.0786	.0786	.0000	
	11:00	Level. Monitor PSI for Min 1 Hr. Adjusting	65	65	.0786	.0786	.0000	
	11:15	Back to 60 Every 15 MIN and recording	65	65	.0786	.0786	.0000	
		Amt. Added Calculate Leak by Determining						
		Bleed back and net Change			.0010	.1143	.1133	Bleed Back
							.0000	Net change


IDENTIFY EACH LINE AS TESTED	Time <u>AM</u> PM	Log of test procedures, Ambient temperature, Weather, ETC	Pressure <u>PSI</u> or kPa		Volume Reading			Remarks Piping run 60' plus.
			Before	After	Before	After	Net Change	
DIESEL (middle)		Same Procedures As listed.						
AEFH	11:15		60 start		.0906			
	11:30		60	60	.0906	.0906	.0000	
	11:45		60	60	.0906	.0906	.0000	
	12:00		60	60	.0906	.0906	.0000	
	12:15		60	60	.0906	.0906	.0000	
					.0010	.1210	.1200	BLEED BACK
							.0000	NET CHANGE
LUBE OIL AEGN	12:15		60 Start		.0156			
	12:30		60	60	.0156	.0156	.0000	
	12:45		60	0	.0156	.0156	.0000	
	1:00		60	60	.0156	.0156	.0000	
	1:15		60	60	.0156	.0156	.0000	
					.0010	.1340	.1330	Bleed Back
							.0000	Net change
TEST RESULTS	Line ID	PASS / FAIL	Net Volume Change Per Hour				DATE TESTED	
	DIESEL	PASS	.0000				5-10-2006	
	DIESEL	PASS	.0000				5-10-2006	
	LUBE OIL	PASS	.0000				5-10-2006	

Mechanical leak Detectors Test Results

Tech, Jeff Pike
DEQ Certification # 25 892
DATE: 5-10-2006
SITE: FOSS Maritime
ADDRESS: 9030 NW ST Helens Rd, Portland, Or 97231

PRODUCT: DIESEL
TYPE OF LEAK
DECTOR: VMI 99-LD2000/R
TYPE OF PRODUCT
LINE: ENVIRON
3GPH TEST: PASSED: XX FAILED:
REPLACED LEAK
DETECTOR: YES: NO: X
IF REPLACED: 3 GPH PASSED: FAILED:
IF YES TYPE OF NEW
LEAK DETECTOR: SSN# [REDACTED]

PRODUCT: DIESEL
TYPE OF LEAK
DECTOR: VMI 99-LD2000/R
TYPE OF PRODUCT
LINE: ENVIRON
3GPH TEST: PASSED: XX FAILED:
REPLACED LEAK
DETECTOR: YES: NO: X
IF REPLACED: 3 GPH PASSED: FAILED:
IF YES TYPE OF NEW
LEAK DETECTOR: SSN# [REDACTED]

PRODUCT: LUBE OIL
TYPE OF LEAK
DECTOR: ~~WATERLESS~~ 
TYPE OF PRODUCT
LINE: ENVIRON
3GPH TEST: PASSED: no test FAILED:
REPLACED LEAK
DETECTOR: YES: NO: X
IF REPLACED: PASSED: FAILED:
IF YES TYPE OF NEW
LEAK DETECTOR: SSN# [REDACTED]

PRODUCT:
TYPE OF LEAK
DETECTOR:
TPYE OF PRODUCT
LINE:
3 GPH TEST: PASSED: FAILED:
REPLACED LEAK
DETECTOR: YES: NO:
IF REPLACED: PASSED: FAILED:
IF YES TYPE OF NEW
LEAK DETECTOR: SSN#



Oregon

Theodore R. Kulonowski, Governor

Department of Environmental Quality

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

February 6, 2006

Jeffery G. Pike
3258 Cascade Hwy NE
Silverton OR 97381

RE: UST Supervisor License

You are licensed by the State of Oregon to supervise regulated underground storage tank services while employed by a licensed UST Service Provider. Your license(s) to supervise specific regulated activities are valid until the expiration date(s) below.

Licensed Services	Lic Nbr	Expiration
Cathodic Protection	26449	05/18/2007
Tank Tightness Testing	25892	03/30/2007

Your license(s) are issued under the provisions of OAR 340-160-005 through 340-160-150 and OAR 340-162-005 through 340-162-150.

The identification card below serves as proof of current licensing and must be available for inspection when performing UST Supervisor activities.

If you have questions concerning your license please contact Steve Paiko at (503) 229-6652 or toll free (in Oregon) (800) 452-4011.

Sincerely,

Wendy Wiles
UST Program Manager
UST Compliance SectionJeffery G. Pike
3258 Cascade Hwy NE
Silverton OR 97381
LICENSED SERVICES LIC # EXPIRESCathodic Protection 26449 05/18/2007
Tank Tightness Testing 25892 03/30/2007

Supervisor Signature



UST SERVICE PROVIDER LICENSE

This License is Issued by the Oregon Department of Environmental Quality to:

Pike's Unlimited
3258 Cascade Hwy NE
Silverton OR 97381

You Are Licensed to Offer the Following Underground Storage Tank (UST) Services:

License Type	License Number	Issued	Expires
-----	-----	-----	-----
UST Services	25893	04/12/2006	04/27/2007

**A Licensed Underground Storage Tank Supervisor Must be Present
at a Site to Perform These Services.**



Authorized by:

Wendy Wiles

Wendy Wiles
UST Program Manager



A Copy of this License Shall be Available For Inspection at All Sites Involving UST Work.

Updated: 07-28-04

COMMERCIAL GENERAL LIABILITY COVERAGE PART**DECLARATION**Effective Date: 01/20/2006 **
12:01 A.M. Standard Time

Policy No. 04-GL-000630848

LIMITS OF INSURANCE

General Aggregate Limit (Other Than Products - Completed Operations)	\$	2,000,000	
Products-Completed Operations Aggregate Limit	\$	2,000,000	
Personal and Advertising Injury Limit	\$	1,000,000	
Each Occurrence Limit	\$	1,000,000	
Damage to Premises Rented To You	\$	100,000	Any One Premises
Medical Expense Limit	\$	EXCLUDED	Any One Person

BUSINESS DESCRIPTION AND LOCATION OF PREMISESForm of Business: **INDIVIDUAL**Business Description*: **UST CONTRACTOR - CATHODIC PROTECTION**

Location of All Premises You Own, Rent or Occupy:

PREMIUM

Location	Code No.	Premium Basis	Rate	Advance Premium
Classification		AJ Area PJ Payroll SJ Gross Sales	Pr/Co All Other	Pr/Co All Other
SEE ATTACHED SCHEDULE				

Minimum Premiums Balance to Equal Minimum Premium

All Other \$ 000

Pr/Co \$ 000

Policywriting \$ 000

Total Advance Premium \$ 000 \$ 000

FORMS AND ENDORSEMENTS (other than applicable Forms and Endorsements shown elsewhere in the policy)

Forms and Endorsements applying to the Coverage Part and made part of this policy at time of issue:

*Information omitted if shown elsewhere in the policy.

**Inclusion of date optional.

These declarations are part of the policy declarations containing the name of the insured and the policy period.

ML 16 07 (09 01)

No page
I could



State of Oregon
Department of
Environmental
Quality

Field Citation No. FC- 0190 NON No.

**Department of Environmental Quality
Underground Storage Tank Program**

**Field Citation
For UST Violations**

This section for
DEQ use only

Page 1 of 3

DEQ Information		UST Facility Information	
Inspection Date:	September 25, 2006	Facility ID#:	7374
Inspector:	GREGORY TORAN	Facility Name:	FOSS MARITIME
DEQ Office:	2020 SW 4 TH AVE SUITE 400 PORTLAND OREGON 97201	Facility Address:	9030 NW SAINT HELENS RD PORTLAND, OR 97231-1127
Phone #:	503-229-5496	County:	Mult

Oregon DEQ inspected the facility listed above and identified the UST violations listed on page 3 of this Field Citation.

Field Citation Issued: ☐ In Person ☒ By Mail ☐ Both Date Issued: Sep. 25, 06

Facility Representative Present During Inspection: ☐ Permittee ☐ Owner ☐ Other

Signature of Facility Representative Present During Inspection* Date:

*This signature indicates receipt of the Field Citation at the time of inspection, and is not an acceptance of the assessed penalty.

Name of Permittee or Owner: Linda L. Brown Foss Maritime Company

Mailing Address: 9030 NW Saint Helens Rd Portland, OR 97231-1127

Field Citation Penalty - See Page 3 for detailed listing of each violation. \$ 150 .00

This Field Citation is issued in accordance with the requirements for the expedited enforcement of underground storage tank (UST) violations, OAR 340-150-0250.

Owner or Permittee must select Option 1 or Option 2 below and return a signed copy of this form to DEQ by the following date: _____

DEQ Business Office
811 SW Sixth Avenue
Portland, Oregon 97204

Check one option

☒ Option 1 - I acknowledge that the listed violation(s) have occurred and am remitting the listed field citation penalty.

Option 2 - I do not want to participate in the expedited enforcement process and understand that my file will be referred to the Department's Office of Compliance and Enforcement for formal enforcement action.

Name: Foss Maritime Co. Owner / Permittee

Signature: Linda L. Brown for Foss Maritime Co. Date: 9/28/06

Important

Read pages 2 and 3 for more information about your options and a detailed listing of violations and compliance requirements.

CC: SUSAN GRECO DEQ-HQ, MITCH SCHEEL DEQ-HQ

White/Original: DEQ Inspector

Pink: Facility Representative

Yellow: DEQ Business Office

Green: Permanent Copy

UST FIELD CITATION

Facility Representative Initials: _____

DATE ISSUED: SEPTEMBER 25, 2006

FIELD CITATION NO.: FC-0190

FACILITY ID: 7374

Page 3 of 3

Violation #1: Failure to protect from corrosion any part (piping) of an UST system that routinely contains a regulated substance.Corrective Action: **Not required, work is complete, documentation has been submitted and is on file. Continue to test cathodic protection.**Rule Citation: 340-150-0320(3) Penalty Amount: \$ **\$100.00** Correct Violation by: **October 25, 2006** Date Violation Corrected:**Violation #2: Failure to have automatic Line Leak Detector on pressure line for new oil tank.**Corrective Action: **As previously discussed, provide notice to DEQ and install approved Line Leak Detector for new oil system.**Rule Citation: 340-150-0410(2) Penalty Amount: \$ **\$50.00** Correct Violation by: **October 25, 2006** Date Violation Corrected:**Violation #3:**

Corrective Action: .

Rule Citation: Penalty Amount: \$ **00.00** Correct Violation by: Date Violation Corrected:**Violation #4:** .

Corrective Action: .

Rule Citation: Penalty Amount: \$ **00.00** Correct Violation by: Date Violation Corrected:**Violation #5:** .

Corrective Action: .

Rule Citation: Penalty Amount: \$ **00.00** Correct Violation by: Date Violation Corrected:**Violation #6:** .

Corrective Action: .

Rule Citation: Penalty Amount: \$ **00.00** Correct Violation by: Date Violation Corrected:Total Penalty Amount (This Page): \$ **\$150.00**Total Penalty Amount (All Pages): \$ **\$150.00****YOU MUST CORRECT THE VIOLATIONS AS REQUIRED, ENTER THE DATES CORRECTED, SIGN THE STATEMENT BELOW AND RETURN THIS FORM TO THE DEQ INSPECTOR LISTED ON PAGE 1 ON OR BEFORE:****Retain a copy of this form and all documentation of corrective actions for your records.**I hereby certify that the UST violations noted above have been corrected.

Permittee/Owner Signature

Date

White/Original: DEQ Inspector

Pink: Facility Representative

Yellow: DEQ Business Office

Green: Permanent Copy

LINE LEAK DETECTION

THIS SECTION SHOULD CONTAIN, BUT IS NOT LIMITED TO THE FOLLOWING:

- DESCRIPTION OF THE METHOD USED, DATE INSTALLED OR INITIATED, AND ANY OTHER PERTINENT DATA (INSTALLER, PERMITS, ETC.)
- MANUAL, INSTRUCTIONS OR METHOD OUTLINE
- THIRD PARTY CERTIFICATION
- O & M SCHEDULE AND REPORTS FOR METHOD USED
- DAILY AND/OR MONTHLY LOG AND REPORTS
- TESTING
- OTHER INFORMATION AS NECESSARY

★ Suction Tested every 3 years systems with foot valve
(oil tank)
ours

• safe suction line will flow back to tank has
check valve at top of system with no foot valve
allows fuel to flow to tank IF pipe has a leak

• pressurized product lines

All pressurized systems must have a mechanical or
electronic line leak detector. Must be 3rd party
certified.

USE → vapor-less 99 LD 2000 ~~is~~ mechanical
leak detector replacement

Mech. Detectors operate below 2 psi (test mode)

restricts to 1 1/2 GPM

must be tested Annually

check applications
must detect 3 GPM at 10 PSI

A. UNDERGROUND PIPING

- A minimum of the most current 12 consecutive months of release detection records must be maintained.
- Any leak test results or other observations or results indicating the possibility of a release must be reported within 24 hours as a suspected release (OAR 340-150-0500) and investigation must immediately begin in accordance with 340-150-0510.
- In lieu of conducting annual line tightness tests on either pressurized or suction piping, monthly monitoring may be conducted by one of the applicable release detection methods described in OAR 340-150-0450 through 340-150-0470, if the method is designed to detect a release from any portion of the underground piping that routinely contains a regulated substance.

1. Pressurized Piping

For underground piping that conveys regulated substances under pressure:

- The piping must be equipped with an automatic line leak detector that detects a leak by restricting or shutting off the flow of regulated substances through underground piping or triggering an audible or visual alarm. Interstitial monitoring sensor systems or stand-alone "sump" sensors are not an acceptable alternative for a line leak detector.
- The line leak detector must be approved by a national organization (e.g., the National Work Group on Leak Detection).
- The line leak detector must be capable of detecting a leak of three gallons per hour at ten pounds per square inch line pressure within one hour.
- An annual test of the operation of the line leak detector must be conducted in accordance with the manufacturer's requirements.
- An annual line tightness test must be conducted that can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure. Interstitial monitoring sensors may replace the annual line tightness test if:
 - The equipment is designed, constructed and installed to monitor all portions of the underground piping that routinely contains a regulated substance.
 - The requirements for interstitial monitoring (OAR 340-150-0465) are met.

2. Suction Piping

- For underground piping that carries a regulated substance under suction (i.e., piping that operates at less than atmospheric pressure):
 - Check the piping for the presence of air in the pipeline in accordance with the National Fire Protection Association standard NFPA, 329 (1999) "Recommended Practices for Handling Releases of Flammable and Combustible Liquids and Gases" Chapter 5, Release Detection of Tanks and Piping, Subsection 5-2.3.2(b), if any of the following indicator conditions are observed by any person dispensing a regulated substance:
 - If there are indications of air in the pipeline or other unusual operating conditions are observed (refer to NFPA 329 Subsection 5-2.3.2(a) for specific indicators), the pipeline check valve should be inspected to determine if it is seated tightly. The check valve must be repaired, replaced or sealed off as appropriate depending on the results of the inspection.

- The requirements of OAR 340-150-0350 through 340-150-0354 must be met for any repair, modification or replacement actions taken to correct a problem.
- A line tightness test must be conducted at least every three years that can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure.
- Release detection is not required for suction piping that is designed and constructed to meet the following standards:
 - The below-grade underground piping operates at less than atmospheric pressure.
 - The below-grade underground piping is sloped so that the contents of the pipe will drain back into the UST if the suction is released.
 - Only one check valve is present in each suction line.
 - The check valve is located directly below and as close as practical to the suction pump.
 - A method is provided that allows DEQ to readily determine compliance.

MONITORING SCHEDULE OUTLINE

USTs and piping have different release detection monitoring schedules depending on the type of method in use. The following table shows which methods require daily monitoring and which must be monitored on a monthly basis. Note that Oregon has requirements for daily monitoring for some methods and that not all methods are appropriate for piping. "N/A" means the method is not applicable and cannot be used.

Release Detection Method	Tank	Pressurized Piping	Suction Piping
Inventory Control	Monthly	N/A	N/A
Manual Tank Gauging	Monthly	N/A	N/A
Statistical Inventory Reconciliation	Monthly	N/A	N/A
Automatic Tank Gauging	Monthly	Daily	Monthly
Vapor Monitoring	Daily	Daily	Monthly
Groundwater Monitoring	Daily	Daily	Monthly
Interstitial Monitoring	Monthly	Daily	Monthly

Vaporless Manufacturing

Vaporless 98LD-2000, 99LD-2000, 99LD-2200, LD-2200 Scout
(for Rigid and Flexible Pipelines)

AUTOMATIC MECHANICAL LINE LEAK DETECTOR

- Certification:** Leak rate of 3.0 gph with $P_D = 100\%$ and $P_{FA} = 0\%$.
- Leak Threshold:** 2.5 gph. A pipeline system should not be declared tight if the test result indicates a loss that equals or exceeds this threshold.
- Applicability:** Gasoline, diesel, aviation fuel.
Other liquids may be tested after consultation with the manufacturer.
- Specification:** System tests pressurized flexible, fiberglass, and steel pipelines.
Tests are conducted at operating pressure.
- Pipeline Capacity:** Maximum of 172 gallons for rigid pipelines.
Maximum of 39.5 gallons for flexible pipelines.
- Waiting Time:** None between dispensing and testing.
None between delivery and testing.
- Test Period:** Response time is less than 1 minute without a leak and 1 to 8 minutes with a leak.
- System Features:** Permanent installation on pipeline.
Automatic testing of pipeline.
Preset threshold.
Single test to determine if pipeline is leaking.
Restricted flow to dispenser if leak is declared.
- Calibration:** System must be checked annually and, if necessary, calibrated in accordance with manufacturer's instructions.

Vaporless Manufacturing
8700 East Long Mesa Drive
Prescott Valley, AZ 86314
Tel: (520) 775-0185

Evaluator: Ken Wilcox Associates
Tel: (816) 443-2494
Dates of Evaluation: 05/20/98, 11/10/98

3rd Party Certification

Training and Services Corp.

AcuRite
(for Fiberglass, Steel and Flexible Pipelines)

LINE TIGHTNESS TEST METHOD

- Certification:** Leak rate of 0.1 gph with $P_D = 100\%$ and $P_{FA} = 0\%$.
- Leak Threshold:** 0.01 gph. A pipeline system should not be declared tight if the test result indicates a loss that equals or exceeds this threshold.
- Applicability:** Gasoline, diesel, aviation fuel, fuel oil #4.
- Specification:** System tests fiberglass, steel and flexible pipelines.
Tests are conducted at 150% operating pressure.
Mechanical line leak detector must be removed from pipeline for duration of test.
- Pipeline Capacity:** Maximum of 150 gallons.
- Waiting Time:** Minimum of 6 hours between delivery and testing.
Minimum of 30 minutes between dispensing and testing.
- Test Period:** Minimum of 30 minutes.
Test data are acquired and recorded manually.
Manual calculations are performed by the operator on site.
- Calibration:** System must be checked annually and, if necessary, calibrated in accordance with manufacturer's instructions.
- Comments:** Operating instructions include specific procedures for flexible pipelines.
Formerly manufactured by Hasstech

Training and Services Corp.
501 Bains St., Suite 113
Brookshire, TX 77423
Tel: (281) 934-3839

Evaluator: Lamar University
Tel: (409) 880-8788
Date of Evaluation: 03/25/91

3rd PARTY CERTIFICATION

I. SUSPECTED RELEASES

A. GENERAL REQUIREMENTS

1. Reporting

- Notification must be given within 24 hours and the procedures in OAR 340-150-0510 followed for any of the following conditions:
 - The discovery by any means of fuel at the UST facility or in the surrounding off-site area such as the presence of free product (i.e., fuel) or vapors in soils, basements, sewer and utility lines, and nearby surface water or release into a secondary containment area. Additionally, identify and mitigate any fire, explosion and vapor hazards at the UST facility in accordance with OAR 340-122-0220(3).
 - Unusual operating conditions such as the erratic behavior of dispensing equipment, the sudden loss of product from the UST system, differences or widely fluctuating water levels or an unexplained presence of water in the tank unless system equipment is immediately tested and found to be defective, but not leaking and is immediately repaired or replaced.
 - Monitoring results or alarms from any release detection method that indicates a release may have occurred, unless the monitoring device is found to be defective and is immediately repaired, recalibrated or replaced, and subsequent monitoring events as required by the specific release detection method does not confirm the initial result. The specific release detection requirements are found in OAR 340-150-0420(8), 340-150-0430(10), 340-150-0435(6), 340-150-0440(5), 340-150-0445(3), 340-150-0450(1) (d), 340-150-0455(5), 340-150-0460(4), 340-150-0465(6) and 340-150-0470(3).
- A confirmation number will be provided upon notice of a suspected release that serves as proof that timely notice was received. This confirmation number should be referenced when reporting the results of actions taken to comply with OAR 340-150-0510.

Alarm
History
to Be
kept
Forever

2. Investigation and Confirmation

- An investigation must be immediately initiated to investigate and confirm a suspected release of fuel. This investigation must be completed within seven days or as otherwise approved.
- Upon expiration of the seven day period (or other approved period), submit:
 - A written description of the system test conducted that determined a release did not occur, including any test results.
 - A written plan of action to complete the suspected release investigation system test or site assessment. Any plan of action must include a firm schedule for completion.

B. SYSTEM TESTS

- Tightness testing must be conducted to determine whether a leak exists in any portion of the UST that routinely contains fuel (OAR 340-150-0445), or the underground piping (OAR 340-150-0410), or both. The cause of a release into any secondary containment units must be investigated, including underground piping, turbine

sumps, transition sumps and dispenser pans, by conducting tests in accordance with manufacturer requirements or as directed by the Department. All fuel or fuel/water mixture must be removed from the containment system and properly disposed of in accordance with all state, federal and local requirements.

- Further investigation is not required if the system test results do not indicate that a release has occurred and if the suspected release was not reported due to any of the conditions described in OAR 340-150-0500(1)(a) (e.g., free product or vapors in soils or basements), unless otherwise directed by the Department.
- If the system test results indicate that a release exists, the UST system must be repaired, replaced or modified and corrective action began.

C. SITE ASSESSMENT

- If the test results for the UST, piping or secondary containment units do not indicate that a release exists, but the suspected release was reported due to any of the conditions described in OAR 340-150-0500(1)(a) or if directed by the Department, the permittee must conduct a site assessment for contaminated soil or groundwater. The presence of a release must be measured for where contamination is most likely to be present based on all information available.
- In selecting sample types, sample locations, and measurement methods, consider the nature of the stored fuel, the type of initial alarm or cause for suspicion, the type of backfill, the depth of groundwater, and other factors appropriate for identifying the presence and source of the release. The requirements for sample collection, analytical tests and methods contained in the UST cleanup rules (OAR 340-122-0205 through 340-122-0360) must be used as appropriate. The Department may require that a sampling plan be submitted for approval before conducting any sampling on a case-by-case basis.
- If the site assessment results do not indicate that a release has occurred, further investigation is not required, unless specifically directed by the Department.
- If the site assessment results indicate that a release has occurred, corrective action must begin.
- If the suspected release investigation confirms that a release has occurred, the confirmed release must be reported within 24 hours and the following release reporting, site investigation and corrective action requirements must begin:
 - For petroleum USTs - OAR 340-122-0205 through 340-122-0360.
 - For USTs containing non-petroleum regulated substances - OAR 340-122-0010 through 340-122-0115, except that releases must be reported in accordance with the requirements of OAR Chapter 340, Division 142.
- Additional actions not specifically listed in this rule may be required on a case-by-case basis to address actual or potential threats to human health or the environment.

D. OFF-SITE IMPACTS

- The procedures in OAR 340-150-0510 must be followed to determine if a UST system is the source of off-site impacts. These impacts include the discovery of fuel (such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface and drinking waters) that has been observed.

INCIDENT REPORTS

Two types of incident report forms should be kept in this section, one for non-reportable spills or suspect releases, and one for reportable spills or suspect releases. Both forms should contain, but not limited to:

- **Date and time**
- **Description of incident**
- **Persons involved**
- **Actions taken**
- **(If reportable, DEQ number)**
- **Resolution or Confirmation**

These forms could assist you with future problems, and could be of significant value.

EMERGENCY RESPONSE PLAN

Your emergency response plan should be tailored to the needs of your specific site and circumstances.

(7) Emergency Response Information. In addition to the requirements of Sections (1) through (6) of this rule, an owner and permittee must provide information about emergency response procedures, including, but not limited to, procedures for overfill protection during delivery of regulated substances, operation of emergency shut off system and alarm response, release reporting and any site specific emergency procedures. The information must include any emergency response requirements made necessary by site specific human health and safety issues or the presence of environmentally sensitive areas, such as nearby streams, wetlands or potential conduits for spreading contamination. The emergency response information must be provided by:

- (a) Written instructions that are provided to any person who dispenses a regulated substance at the UST facility.
- (b) Signage posted in prominent areas of the UST facility that is easily visible to any person dispensing a regulated substance.
- (c) A combination of both Subsections (a) and (b) of this section.

Signage

- **Emergency Shut-off**
- **Overfill alarm horn**
- **No Smoking**
- **Spill containment equipment**
- **Other as needed**

Lists

- **Immediate actions needed at site**
- **Who to call**

Procedures

- **Written instructions given to all affected employees**
- **Written plan of action for both reportable and non-reportable spills or releases**

Routine O & M schedule for UST facilities

- 1. Check spill containment on fill risers at least weekly, more often in extremely wet weather. Also check after each fuel delivery. Empty any debris or contaminated liquid and dispose of it in the proper manner. If there is only fuel in the containment, you can drain it into the tank without having to worry about contamination.**
- 2. Check turbine and dispenser sumps at least monthly, more often in extremely wet weather or if vapors are detected. Empty any debris or contaminated liquid and dispose of it in the proper manner. This is part of your monthly line monitoring. If you have sump sensors, record any alarms for the month or operating and no alarms for the month.**
- 3. Check impact valves when changing filters at least every six months to make sure they are operating.**
- 4. Perform a monthly inventory of your spill containment kit and replace any pads, booms, etc. that may have been used.**
- 5. Make sure NO Smoking and Emergency Shut-off signs are in place and that nothing has been placed over or in front of them so they can be easily seen.**
- 6. Check incident logs daily and make sure any spill has been cleaned up properly and completely, or that the proper notification was made.**
- 7. Record monthly tank and line leak detection. Check tank tests weekly to make sure you have a pass for each tank, at the proper level, if you are using Automatic Tank Gauging.**
- 8. List other necessary items for your specific site.**

Wilhelm Nodl



Oregon

Theodore Kulongoski, Governor

Department of Environmental Quality

Northwest Region Portland Office

2020 SW 4th Avenue, Suite 400

Portland, OR 97201-4987

(503) 229-5263

FAX (503) 229-6945

TTY (503) 229-5471

February 26, 2007

LINDA BROWN
FOSS MARITIME COMPANY
9030 NW SAINT HELENS RD
PORTLAND, OR 97231-1127

RE: UST Compliance Inspection
Facility ID No.: 7374
FOSS MARITIME
9030 NW SAINT HELENS RD
PORTLAND, OREGON

On September 25, 2006, the Department of Environmental Quality (DEQ) completed an Operation and Maintenance (O&M) inspection at the above referenced facility. The DEQ has completed a review of the inspector's observations and the information collected during the inspection. Based on the findings of this inspection, the DEQ has determined that the regulated USTs at this facility are **in compliance** with State of Oregon UST requirements.

The DEQ appreciates your efforts to operate and maintain your UST system in compliance with Oregon environmental law. This facility is subject to future inspections. Please remember to conduct service and maintenance inspections and periodic testing at the required intervals and to implement and/or maintain adequate record keeping.

Some general recommendations for maintaining UST compliance are listed below.

Schedule and complete annual or tri-annual UST system testing as necessary. You may be asked for these records on a yearly basis. Annual tests must be completed every 12 months on or before the anniversary date of the tank install or the previous test.

Monitor tanks and piping for leaks and keep twelve months of monthly and or daily records as necessary for your specific systems.

Maintain financial responsibility coverage for pollution liability.

Keep spill prevention devices emptied and clean.

Monitor fuel delivery records for signs of overfilling to capacity and make corrections to defective overfill prevention equipment, or improper delivery procedures as necessary.

If turbine containments are taking on water and exposing unprotected steel product piping connections to corrosive conditions, take action to prevent this by any means, including repairing the leaky sump and sealing off the source of the water.

UST inspection results
Facility ID: 7374
February 26, 2007

Report a suspected release to the DEQ within 24 hours and begin an investigation when tank or line tests confirm a failed system, when fuel alarms indicate a failed leak test, when fuel is found in secondary containments, or when liquid of any kind (dry or vacuum systems) is found in tank interstitial space, unless the monitoring equipment is found to be faulty and repaired or the alarm is determined to be false.

Contact your service provider for assistance with testing and alarm investigation.

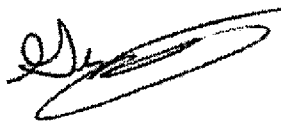
Contact your service provider and begin an investigation if you suspect fuel loss, equipment is malfunctioning, leak detectors are triggering, or product lines are losing prime.

Report a confirmed release to the DEQ within 24 hours of confirming product loss into the subsurface in any amount.

You should become familiar with the UST compliance rules OAR Chapter 340, Division 150. Forms, rules, and guidance documents to assist you in being safe and staying in compliance are available on the DEQ UST section website. The web address is
http://arcweb.sos.state.or.us/rules/OARs_300/OAR_340/340_150.html

I can be reached at 503-229-5496 to report a confirmed or suspected release or to answer any questions you may have.

Sincerely,



Gregory Toran
Environmental Specialist

(get:GET)





Oregon

Theodore Kulongoski, Governor

Department of Environmental Quality

Northwest Region Portland Office

2020 SW 4th Avenue, Suite 400

Portland, OR 97201-4987

(503) 229-5263

FAX (503) 229-6945

TTY (503) 229-5471

April 19, 2006

STUART SANBORN
FOSS MARITIME COMPANY
9030 NW SAINT HELENS RD
PORTLAND OR 97231-1127

RE: UST Compliance Inspection
Facility ID No.: 7374

The purpose of this letter is to inform you that the Oregon Department of Environmental Quality (DEQ) would like to schedule an underground storage tank (UST) inspection at your facility located at 9030 Nw Saint Helens Rd in Portland, Oregon.

A thorough inspection at your facility will be conducted to determine compliance with all state UST requirements. These requirements include release detection, spill and overfill prevention, corrosion protection, release detection, equipment operation, maintenance, recordkeeping, financial responsibility, and repair procedures. **The inspection is not being conducted as technical assistance and items found not to be in compliance with UST rules will result in enforcement action against the permittee and tank owner.**

Please have all testing, system design, repair, and leak detection records available for review. This includes records to show the type of tanks and piping installed, the previous twelve months of leak detection records for tanks and piping, all cathodic protection testing and inspection records, records to demonstrate cathodic protection design by an expert, tank and line pressure test records, testing and 3rd party performance records for any leak detection devices, records for tank monitor repairs or calibrations, records for tank or piping repairs, leak detector testing, lining inspections, and any other UST system records that you may have. It will also be necessary that you provide documentation to verify the overfill protection system as installed and overfill alarms as functional, or be prepared to demonstrate functionality during the inspection.

The inspection could take up to three hours to complete. Please call me to schedule the inspection at your facility. The guidance document "How to Prepare for an UST Compliance Inspection" has been enclosed to assist you in preparation for your inspection.

DEQ suggests that you hire a professional UST maintenance company to be there during the inspection providing sump access, verifying operation of overfill protection, testing sensors and tank monitors, pulling drop tubes, printing monitoring and test reports, or to answer specific technical questions regarding your systems.

You may also want to have your UST maintenance company inspect and review equipment and records and to verify compliance with UST rules, prior to the inspection date. As a reminder, the inspection is not being conducted as technical assistance and items found not to be in compliance with UST rules will result in enforcement action against the permittee and or the tank owner.

If you own more than one facility, and have received two or more letters as part of this mailing, I am open to inspecting up to three of your facilities in a single day. Please call me, I can be reached at 503-229-5496 to schedule the inspection and to answer any questions you may have.

Sincerely,

Gregory Toran
Environmental Specialist

Enclosure UST Guidance document

Zip 97231-1127 SOC Pending

UST Facility Compliance Inspection Report

Inspection Date	/2002	Inspector		Mod App	Y N
				Valid Operating Certificate	Y N

Indicate inspection type by marking appropriate box

Initial Compliance	Follow-up
--------------------	-----------

Part A: Facility and Owner / Operator Information

Enter correct name and site location information

FACILITY INFORMATION			
FACILITY NAME		DEQ ID #	
SITE ADDRESS			
CITY			
COUNTY		Co. #	
PHONE			

Enter verified owner / operator information

OWNER / OPERATOR INFORMATION			
	PERMITTEE	TANK OWNER	PROPERTY OWNER
NAME			
ADDRESS			
CITY			
STATE			
ZIP CODE			
TELEPHONE			
FAX			
EMAIL			

SITE CONTACT NAME	
SITE CONTACT PHONE	

Part A.1: Significant Operational Compliance (SOC)

Indicate SOC status after inspection by circling appropriate response

Facility is in SOC with UST Equipment Standards (SOCES)	Y	N
Facility is in SOC with Release Detection Requirements (SOCRD)	Y	N

Part B: Underground Storage Tank Information

Enter tank numbers if different from 1-6. Request documents to establish dates.
Compare current information with database.

Tank #	1	2	3	4	5	6
Permit #						
Product						
Volume, gal.						
Tank Type						
Tank Mfr						
New/Existing						
Install Date						
Installer						
Tank C. P. Date						
Tank Lining Date						
Temp Closure Date						
Piping Type						
Piping Mfr						
Piping Install Date						
Piping Installer						

Part C: Facility Layout Diagram

**ATTACH APPROPRIATE "AS BUILT"
FACILITY PLANS**

Part D: Release Detection Information- § 40 CFR 280.41

Check one release detection method for each tank.

Release Detection Method	CFR Reference	280.41(a)	280.41(b)	280.41(c)	280.41(d)	280.41(e)	280.41(f)	280.41(g)	280.41(h)
Automatic Tank Gauging	280.43(d)	G.1							
Interstitial Monitoring	280.43(g)	G.2							
SIR	280.43(h)	G.3							
Inventory Control & TTT	280.43(a)	G.3							
Manual Tank Gauging	280.43(b)	G.4							
Manual Tank Gauging & TTT	280.43(b)	G.3 & G.4							
Vapor Monitoring	280.43(e)	G.6							
Groundwater Monitoring	280.43(f)	G.5							
Other Methods	280.43(h)								
None Required									

1	<input type="checkbox"/> Tank has Valid Release Detection Method	Y	N	Y	N	Y	N	Y	N	Y	N
---	--	---	---	---	---	---	---	---	---	---	---

Complete appropriate Section of Part "G" prior to making determination

Check the piping release detection method(s) that apply.

Piping Methods	CFR Reference	280.41(a)	280.41(b)	280.41(c)	280.41(d)	280.41(e)	280.41(f)	280.41(g)	280.41(h)
Pressurized Piping Methods									
Daily Interstitial (pipe)	280.44(c)	G.7							
Daily Interstitial (sump)	280.44(c)	G.7							
Automatic Line Leak Detector	280.44(a)	G.7							
Annual Line Tightness Test	280.44(b)	G.7							
Daily Groundwater Monitoring	280.44(c)	G.5							
Daily Vapor Monitoring	280.44(c)	G.6							
Other Daily Methods	280.44(c)								
Suction Piping Methods									
Interstitial Monitoring	280.44(c)	G.7							
Line Tightness Test (3yr)	280.44(b)	G.7							
Daily Groundwater Monitoring	280.44(c)	G.5							
Daily Vapor Monitoring	280.44(c)	G.6							
None Needed (Safe Suction)	280.41(b)(2)	G.8							
None needed/No underground									

2	<input type="checkbox"/> Piping has valid Release Detection Method	Y	N	Y	N	Y	N	Y	N	Y	N
---	--	---	---	---	---	---	---	---	---	---	---

Complete PART G.7 prior to making determination

Comments:

Part E: Spill Prevention - § 40 CFR 280.20(c)

	Compliance with Requirements	1991	1992	1993	1994	1995	1996
1	Spill device required.	Y N	Y N	Y N	Y N	Y N	Y N
2	☐ Fill pipe is fitted with spill prevention equipment.	X N	X N	X N	Y N	Y N	Y N
3	☐ Equipment prevents release during product transfer.	X N	X N	X N	Y N	Y N	Y N
4	Release due to spills has occurred.	Y X	Y X	Y X	Y N	Y N	Y N
5	Releases reported as required.	Y X	Y X	Y X	Y N	Y N	Y N
6	Spill Prevention Plan required.	Y N	Y N	Y N	Y N	Y N	Y N

Comments:

SPILL Buckets

Part F: Overfill Prevention - § 40 CFR 280.20(c)

	Compliance with Requirements	1991	1992	1993	1994	1995	1996
1	Overfill device required.	X N	X N	X N	Y N	Y N	Y N
2	Tank is equipped with Fill Pipe Device.	Y X	Y X	Y X	Y N	Y N	Y N
3	Tank is equipped with Vent Ball Float Valve.	X N	X N	X N	Y N	Y N	Y N
4	Tank is equipped with High Level Alarm. (ATG)	X N	X N	X N	Y N	Y N	Y N
5	☐ Device stops delivery at 95% capacity or less.	X N	X N	X N	Y N	Y N	Y N
6	☐ Device restricts or warns at 90% capacity or less.	X N	X N	X N	Y N	Y N	Y N
7	Product transfer procedures performed as required.	X N	X N	X N	Y N	Y N	Y N
8	Release due to Overfill has occurred.	Y X	Y X	Y X	Y N	Y N	Y N
9	Releases reported as required. NA	X X	X X	X X	Y N	Y N	Y N
10	Overfill Prevention Plan required.	Y N	Y N	Y N	Y N	Y N	Y N

Comments:

Ball Float Valve

Part G.1: Automatic Tank Gauging § 40 CFR 280.43(d)

Complete Part G.1 if the UST system uses an Automatic Tank Gauge (ATG)

ATG Manufacturer:	INCON
ATG Model:	TS-1001
ATG Probe Manufacturer:	
ATG Probe Model:	
ATG Install Date:	1998
ATG Installed by:	1998 PNE
ATG Maintained by:	MAScot

#	Notes/Notes/Date Item	11/11/11	11/12/11	11/13/11	11/14/11	11/15/11	11/16/11
1	Device has approved 3rd-Party evaluation.	X N	Y N	Y N	Y N	Y N	Y N
2	Installation and O&M performed as per manufacturer.	X N	Y N	Y N	Y N	Y N	Y N
3	Leak Test performed Monthly.	X N	Y N	Y N	Y N	Y N	Y N
4	12 months of records.	X N	Y N	Y N	Y N	Y N	Y N
5	Suspected releases reported as required.	N/A	Y X	Y N	Y N	Y N	Y N
6	UST ATG passed inspection	X N	Y N	Y N	Y N	Y N	Y N

If the answer to any question is No, explain below. List all problems, even those corrected during inspection.

Comments:

Part G.2: UST Interstitial Monitoring- § 40 CFR 280.43(g)

Complete part G.2 if UST uses interstitial monitoring.

Answer Yes or No for TANKS		1	2	3	4	5	6
Electronic and Manual Monitoring Systems							
1	Electronic monitoring method utilized.	Y N	Y N	Y N	Y N	Y N	Y N
2	Manual monitoring method utilized.	Y N	Y N	Y N	Y N	Y N	Y N
3	☐ Monthly monitoring performed. (See Part D)	Y N	Y N	Y N	Y N	Y N	Y N
4	☐ Monitoring devices are 3 rd -Party certified.	Y N	Y N	Y N	Y N	Y N	Y N
5	☐ Installation and O&M performed as per manufacturer.	Y N	Y N	Y N	Y N	Y N	Y N
6	☐ Can detect leak from any portion that contains product.	Y N	Y N	Y N	Y N	Y N	Y N
7	1 year of monthly release detection records are available.	Y N	Y N	Y N	Y N	Y N	Y N
8	Suspected releases reported as required.	Y N	Y N	Y N	Y N	Y N	Y N
★	Passed Inspection Y/N	Y N	Y N	Y N	Y N	Y N	Y N

Comments:

NOV 1997

FEDERAL GOVERNMENT

Part G.3: UST Inventory Control, Tightness Testing or SIR
§ 40 CFR 280.43(a), (c) and (h)

Complete PART G.3 if UST Release Detection method is inventory control, tightness testing or SIR.

1	☞ Readings are recorded each operating day and reconciled monthly.	Y N
2	The correct calibration chart is used to determine volume to the nearest 1/8 inch of product depth.	Y N
3	Tank inventory readings are logged before and after each delivery.	Y N
4	Gauge stick can be read to nearest 1/8 inch and can measure full height of tank.	Y N
5	Monthly water readings measured to the nearest 1/8" and used in inventory calculation.	Y N
6	Each dispenser has a totalizer with currently calibrated meter.	Y N
7	12 months of release detection records.	Y N
8	Fill pipe drop tube ends no more than one foot from bottom of tank.	Y N
9	☞ Suspected releases reported as required.	Y N
10	☞ Ten-year exemption from advanced leak detection has expired.	Y N
11	10 year exemption from advance leak detection expires- (date)	
★	Passed Inspection Y/N	Y N
Statistical Inventory Reconciliation (SIR) only		
12	☞ Monthly monitoring is performed (See PART D)	Y N
13	☞ SIR method has third party approval.	Y N
14	☞ Suspected releases reported as required.	Y N
15	12 months of release detection records.	Y N
★	Passed Inspection Y/N	Y N
Tightness Test only		
16	☞ Tightness Test conducted on 5-year basis as tank Release Detection method.	Y N
17	☞ Tightness Test has third party approval.	Y N
18	☞ Tightness Test performed by Oregon certified tester. Lic. #:	Y N
19	☞ Ten-year exemption from advance leak detection has expired.	Y N
20	☞ Suspected releases reported as required.	Y N
21	Date next Tightness Test is due (1 yr, 3 yr or 5 yr) (date)	
22	10 year exemption from advance leak detection expires- (date)	
★	Passed Inspection Y/N	Y N

Comments:

Part G.4: Manual Tank Gauging- § 40 CFR 280.43(b)

Complete Part G.4 for USTs using Manual Tank Gauging

	1	2	3	
1	Records show level measurements taken at start and end of 36, 44 or 58 hours with no product added or removed during the period.	Y N	Y N	Y N
2	Weekly measurements are recorded.	Y N	Y N	Y N
3	☐ Monthly reconciliation / comparison done correctly.	Y N	Y N	Y N
4	Level at start and end is average of two stick readings.	Y N	Y N	Y N
5	☐ Weekly and monthly average of variation between start and end is less than standard for tank size and waiting time.	Y N	Y N	Y N
6	Gauge stick can be read to 1/8" to full height of tank.	Y N	Y N	Y N
7	MTG is sole leak detection for tanks up to 1,000 gallons.	Y N	Y N	Y N
8	MTG + TTT for 1,001 to 2,000 gallon tank, <10 yrs after CP added.	Y N	Y N	Y N
9	If #8=Y, TTT done in last 5 yrs. (Complete Part G.3 #15 THROUGH #21)	Y N	Y N	Y N
10	12 months of monitoring records.	Y N	Y N	Y N
11	Suspected releases reported as required.	Y N	Y N	Y N
★	MTG Passed Inspection	Y N	Y N	Y N

Comments:

1

Part G.5: Groundwater Monitoring- § 40 CFR 280.43(f)

Complete PART G.5 if facility uses the groundwater monitoring release detection method.

Well is registered with the Oregon Water Resources Department.	Y	N	Y	N	Y	N	Y	N
Well log is available and on file.	Y	N	Y	N	Y	N	Y	N
Well is clearly marked and secure.	Y	N	Y	N	Y	N	Y	N
Water in well was observed at a depth of (x, ft) bgs.		ft		ft		ft		ft

Answer Yes or No for each question below.

1	Groundwater monitoring is used as Release Detection method for all USTs at this facility.	Y	N
2	Groundwater monitoring is used as Release Detection method for all piping at this facility.	Y	N
3	Site assessment was completed prior to installation of groundwater monitoring wells.	Y	N
4	Documentation of monthly monitoring is available and in file.	Y	N
5	Specific gravity of stored product is less than one.	Y	N
6	Hydraulic conductivity of the soil between the UST system and wells is not less than 0.01 cm/sec.	Y	N
7	Hydraulic conductivity was determined by a registered geologist and report is available.	Y	N
8	Groundwater is not more than 20 feet from ground surface.	Y	N
9	Wells are sealed from the ground surface to the top of the filter pack.	Y	N
10	Wells are located within UST excavation or as close as feasible.	Y	N
11	Screened interval intercepts groundwater under both high and low water conditions.	Y	N
12	Continuous monitoring or manual method can detect presence of 1/8 inch of product on water.	Y	N
13	Groundwater is monitored Manually on a daily basis.	Y	N
14	Groundwater is monitored continuously and system components are present and operational.	Y	N
15	Well does not cause any increased risk to human health or the environment.	Y	N
★	Groundwater monitoring system passed inspection.	Y	N

Make sure that the site diagram on page 2 indicates the location of each groundwater monitoring well and the distance from the UST system.

Comments:

Part G.6: Vapor Monitoring- § 40 CFR 280.43(e)

Complete PART G.6 if UST Systems uses Vapor Monitoring as a release detection method.

	Well #1	Well #2	Well #3	Well #4
Well is clearly marked and secure.	Y N	Y N	Y N	Y N
Well caps are tight	Y N	Y N	Y N	Y N
Constructed to prevent interference by moisture	Y N	Y N	Y N	Y N
Well is free of debris and seems to have been recently checked	Y N	Y N	Y N	Y N

1	UST excavation zone was assessed prior to vapor monitoring system installation.	Y	N
2	Backfill material is sufficiently porous.	Y	N
3	Stored product or tracer is sufficiently volatile to be detected by equipment used.	Y	N
4	Rainfall, groundwater, soil moisture or other interference will not delay 30-day detection time.	Y	N
5	Background contamination will not interfere with detection method.	Y	N
6	Vapor monitor will detect any significant increase above background.	Y	N
Automatic Systems			
7	Control box is accessible and power is on.	Y	N
8	Documentation of continuous monitoring for last 12 months is available.	Y	N
9	Equipment is accessible and functional.	Y	N
10	Vapor sensor is maintained and calibrated within last year, as per manufacturer.	Y	N
Manual Systems			
11	Documentation of daily monitoring for last 12 months is available.	Y	N
12	Equipment is accessible and functional.	Y	N
13	Vapor sensor is maintained and calibrated within last year, as per manufacturer.	Y	N
★	Vapor monitoring system passed inspection	Y	N

Make sure that the site diagram on page 2 indicates the location of each vapor monitoring well and the distance from the UST system.

Comments:

Part G.7: Pressure Piping Release Detection- § 40 CFR 280.44

Complete PART G.7 for all pressure piping systems.

Make and Model of all Detectors: Enter information in PART K- General Comments

1	Other Tank method utilized.	Y N	Y N	Y N	Y N	Y N	Y N
Automatic Line Leak Detectors							
2	Mechanical Line Leak Detectors utilized.	Y N	Y N	Y N	Y N	Y N	Y N
3	Electronic Line Leak Detectors utilized.	Y N	Y N	Y N	Y N	Y N	Y N
4	☐ Can detect leak in all piping that contains product						
5	☐ Leak Detector is 3 rd -Party approved.	Y N	Y N	Y N	Y N	Y N	Y N
6	☐ Leak Detector install and O&M as required.	Y N	Y N	Y N	Y N	Y N	Y N
7	☐ Mechanical LLD tested annually.	Y N	Y N	Y N	Y N	Y N	Y N
8	LLD activates product shut off.	Y N	Y N	Y N	Y N	Y N	Y N
9	LLD activates product flow restrictor.	Y N	Y N	Y N	Y N	Y N	Y N
10	LLD activates audible or visual alarm.	Y N	Y N	Y N	Y N	Y N	Y N
11	Suspected releases reported as required.	Y N	Y N	Y N	Y N	Y N	Y N
★	Line Leak Detectors passed inspection	Y N	Y N	Y N	Y N	Y N	Y N
Annual Line Tightness Testing							
12	Line Tightness Test required.	Y N	Y N	Y N	Y N	Y N	Y N
13	☐ Conventional Tightness Test performed.	Y N	Y N	Y N	Y N	Y N	Y N
14	☐ Tightness Test is 3 rd -Party approved.	Y N	Y N	Y N	Y N	Y N	Y N
15	☐ TTT performed by Oregon certified Tester.	Y N	Y N	Y N	Y N	Y N	Y N
16	☐ Electronic Tightness Test performed.	Y N	Y N	Y N	Y N	Y N	Y N
17	☐ Electronic LLD 3 rd -Party certified @ 0.1 gph.	Y N	Y N	Y N	Y N	Y N	Y N
18	☐ LLD install and O&M as per manufacturer.	Y N	Y N	Y N	Y N	Y N	Y N
19	Suspected releases reported as required.	Y N	Y N	Y N	Y N	Y N	Y N
★	Annual Line Tightness Test passed inspection	Y N	Y N	Y N	Y N	Y N	Y N
Daily monitoring used in lieu of Annual Line Tightness Test							
20	Daily Interstitial Monitoring (pipe) performed	Y N	Y N	Y N	Y N	Y N	Y N
21	Daily Interstitial Monitoring (sump) performed	Y N	Y N	Y N	Y N	Y N	Y N
22	Daily Groundwater Monitoring performed (G.5)	Y N	Y N	Y N	Y N	Y N	Y N
23	Daily Vapor Monitoring performed (G.6)	Y N	Y N	Y N	Y N	Y N	Y N
24	☐ Can detect leak in all piping that contains product.	Y N	Y N	Y N	Y N	Y N	Y N
25	☐ Monitoring equipment is 3 rd -Party certified.	Y N	Y N	Y N	Y N	Y N	Y N
26	☐ Equipment install and O&M as per manufacturer.	Y N	Y N	Y N	Y N	Y N	Y N
27	☐ Daily method functional	Y N	Y N	Y N	Y N	Y N	Y N
28	12 months of daily records.	Y N	Y N	Y N	Y N	Y N	Y N
29	Suspected releases reported as required.	Y N	Y N	Y N	Y N	Y N	Y N
★	Daily monitoring passed inspection	Y N	Y N	Y N	Y N	Y N	Y N

Part G.8: Suction Piping Release Detection-§ 40 CFR 280.41(b)(2)

1	Pipe slopes to tank and operates at atmosphere.	Y N	Y N	Y N	Y N	Y N	Y N
2	Only one check valve used.	Y N	Y N	Y N	Y N	Y N	Y N
3	Check valve under dispenser.	Y N	Y N	Y N	Y N	Y N	Y N
4	#1, #2, & #3 verified?- No Release Detection required.	Explain in PART L					
5	☐ Monthly Monitoring method utilized.	Y N	Y N	Y N	Y N	Y N	Y N
6	☐ Line Tightness Test performed every 3 years.	Y N	Y N	Y N	Y N	Y N	Y N
7	LTT has 3 rd -Party evaluation.	Y N	Y N	Y N	Y N	Y N	Y N
8	LTT performed by Oregon certified Tester.	Y N	Y N	Y N	Y N	Y N	Y N
9	Suspected release reported as required.	Y N	Y N	Y N	Y N	Y N	Y N

Part H: Corrosion Protection § 40 CFR 280.20 and 21

Complete PART H for all UST systems that have corrosion protection equipment.

1	Tank is an "EXISTING" steel tank.	Y N	Y N	Y N	Y N	Y N
2	Tank is a "NEW" steel tank.	Y N	Y N	Y N	Y N	Y N
3	Tank has "Galvanic" corrosion protection.	Y N	Y N	Y N	Y N	Y N
4	Tank has "Impressed Current" CP.	Y N	Y N	Y N	Y N	Y N
5	☛ Steel tank has CP as required.	Y N	Y N	Y N	Y N	Y N

6	Piping is "EXISTING" metal pipe.	Y N	Y N	Y N	Y N	Y N
7	Piping is "NEW" metal pipe.	Y N	Y N	Y N	Y N	Y N
8	Piping has "Galvanic" corrosion protection.	Y N	Y N	Y N	Y N	Y N
9	Piping has "Impressed Current" CP.	Y N	Y N	Y N	Y N	Y N
10	☛ Steel Pipe has CP as required.	Y N	Y N	Y N	Y N	Y N

11	☛ "EXISTING" tank Integrity Assessment OK.	Y N	Y N	Y N	Y N	Y N
12	☛ "NEW" tank has suitable dielectric coating.	Y N	Y N	Y N	Y N	Y N
13	Date CP was installed:					
14	☛ Tank CP System has Test Station.	Y N	Y N	Y N	Y N	Y N
15	☛ Field Constructed CP Designed by Expert.	Y N	Y N	Y N	Y N	Y N
16	☛ CP protects all metal parts continuously.	Y N	Y N	Y N	Y N	Y N
17	☛ 6-month inspection completed.	Y N	Y N	Y N	Y N	Y N
18	Date of 6-month inspection:					
19	☛ Records for last two inspections.	Y N	Y N	Y N	Y N	Y N
20	Date next inspection is due:					
21	☛ Inspection by accepted method.	Y N	Y N	Y N	Y N	Y N
22	☛ System has power and is "ON". (IC only)	Y N	Y N	Y N	Y N	Y N
23	☛ 60-day log is present and current. (IC only)	Y N	Y N	Y N	Y N	Y N
24	☛ 6 complete months of log entries. (IC only)	Y N	Y N	Y N	Y N	Y N
★	Tank CP passed inspection	Y N	Y N	Y N	Y N	Y N

25	"NEW" piping has suitable dielectric coating.	Y N	Y N	Y N	Y N	Y N
26	Date piping CP system installed:					
27	☛ CP Test Station for piping installed.	Y N	Y N	Y N	Y N	Y N
28	☛ Field Constructed CP designed by expert.	Y N	Y N	Y N	Y N	Y N
29	☛ CP protects all metal parts continuously.	Y N	Y N	Y N	Y N	Y N
30	☛ 6-month Inspection completed.	Y N	Y N	Y N	Y N	Y N
31	Date of 6-month inspection:					
32	Date next inspection is due:					
33	☛ Inspection by accepted method.	Y N	Y N	Y N	Y N	Y N
34	☛ Records for last two inspections.	Y N	Y N	Y N	Y N	Y N
35	☛ System has power and is "ON". (IC only)	Y N	Y N	Y N	Y N	Y N
36	☛ 60-day log is present and current. (IC only)	Y N	Y N	Y N	Y N	Y N
37	☛ 6 complete months of log entries. (IC only)	Y N	Y N	Y N	Y N	Y N
★	Piping CP passed inspection	Y N	Y N	Y N	Y N	Y N

Enter written comments regarding PART H in PART L.

Part I: Internal Lining § 40 CFR 280.21

Complete PART I if the Tank has internal lining and NO corrosion protection.

		1.1	1.2	1.3	1.4	1.5	1.6
1	Date tank lining was installed.						
2	Lining Installer						
3	Lining installed by approved method.	Y N	Y N	Y N	Y N	Y N	Y N
4	10-Year inspection due.	Y N	Y N	Y N	Y N	Y N	Y N
5	10-year lining inspection completed.	Y N	Y N	Y N	Y N	Y N	Y N
6	10-year inspection by 3 rd -Party method.	Y N	Y N	Y N	Y N	Y N	Y N
7	10-year lining inspection passed.	Y N	Y N	Y N	Y N	Y N	Y N
8	5-year inspection due.	Y N	Y N	Y N	Y N	Y N	Y N
9	5-year inspection completed.	Y N	Y N	Y N	Y N	Y N	Y N
10	5-year inspection by 3 rd -Party method.	Y N	Y N	Y N	Y N	Y N	Y N
11	5-year inspection passed.	Y N	Y N	Y N	Y N	Y N	Y N
12	Date next inspection is due:						
★	Lined tanks passed inspection	Y N	Y N	Y N	Y N	Y N	Y N

Part J: Temporary Closure § 40 CFR 280.70

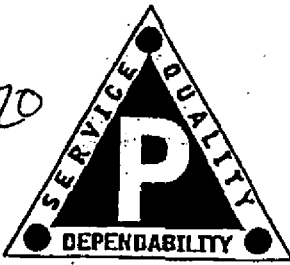
Complete PART J for all UST systems that are closed or in Temporary Closure.

If Release Detection is required, complete the appropriate sections of PART D and PART G.

If Corrosion Protection is required, complete PART H.

If the Tank has an Internal Lining and has NO corrosion protection, complete PART I.

		1.1	1.2	1.3	1.4	1.5	1.6
1	System in Temporary Closure.	Y N	Y N	Y N	Y N	Y N	Y N
2	Temporary Closure Start Date						
3	Temporary Closure duration longer than 3 mos.	Y N	Y N	Y N	Y N	Y N	Y N
4	System capped and secured as required.	Y N	Y N	Y N	Y N	Y N	Y N
		1.1	1.2	1.3	1.4	1.5	1.6
5	Release Detection required.	Y N	Y N	Y N	Y N	Y N	Y N
6	Release Detection method is valid. (D)	Y N	Y N	Y N	Y N	Y N	Y N
7	Release Detection performed as required. (G)	Y N	Y N	Y N	Y N	Y N	Y N
8	Corrosion Protection required.	Y N	Y N	Y N	Y N	Y N	Y N
9	Corrosion Protection O&M as required. (H)	Y N	Y N	Y N	Y N	Y N	Y N
10	Tank has Internal Lining.	Y N	Y N	Y N	Y N	Y N	Y N
11	Internal Lining inspected as required. (I)	Y N	Y N	Y N	Y N	Y N	Y N
		1.1	1.2	1.3	1.4	1.5	1.6
12	Release Detection required.	Y N	Y N	Y N	Y N	Y N	Y N
13	Release Detection method is valid. (D)	Y N	Y N	Y N	Y N	Y N	Y N
14	Release Detection performed as required. (G)	Y N	Y N	Y N	Y N	Y N	Y N
15	Corrosion Protection required.	Y N	Y N	Y N	Y N	Y N	Y N
16	Corrosion Protection O&M as required (H)	Y N	Y N	Y N	Y N	Y N	Y N



120

ALEMITE - MICROFLEX - DIXON - DAYCO - GATES - BAND IT - IDEAL - COXREELS - HANNAY -
SIERRA - BANJO - WILLCOX - FLEXAUST - KANAFLEX - GENERAL RUBBER - SCHLUMBERGER -
BEHRINGER - TITEFLEX - OPW ENGINEERED - PT COUPLING - FEDERAL HOSE - EGC -
GOODYEAR - HYDRO LINE - IDEAL - THERMOID

PETERSON INDUSTRIAL PRODUCTS

2300 NW 29th P.O. BOX 10917 PORTLAND OREGON 97210-0917
503-222-9446 Fax 503-222-9449
E-MAIL: SALES@PIPCOHOSE.COM

TO: Foss Maritime FAX: 503-289-7385
ATTN: STU SANBORN FROM: Brent McNeill
PAGES TO FOLLOW LEAD 1 DATE: 6/1/05

Subject/Message:

STU,

Here is our Quote to replace
your hoses. Our quote includes
the system we discussed to
contain any leakage from a
failed "inner" hose.

Lets get together on this
soon.

THANKS!

Brent

== > QUOTATION < ==

PETERSON IND. PROD. INC.
2300 NW 29TH
P O BOX 10917
PORTLAND OR 97210

QUOTE#: 239703

PHONE: 503-222-9446
FAX: 503-222-9449

DATE: 05/20/05
PAGE: 1

YOUR PO/INQ NO.:

ATTENTION: MARK/STU
CARBON COPY:

WHEN REPLYING, CONTACT:
ERICH BAUER

FOSS MARITIME
TO: ATTN: ACCOUNTS PAYABLE
9030 NW ST HELENS RD
PORTLAND OR 97231-1127

CUST PHONE: 503-286-0631
CUST FAX: 503-735-4976

LINE	ITEM NUMBER	DESCRIPTION	QUANTITY	UNIT PRICE	U/M
10	2LONGHORNH524-1H524-1BB-19	HOSE ASSY W/SCO 2" X 19' OAL GATES LONGHORN PET. HOSE C/W FEMALE X FEMALE SCOVILL EACH END TEST AND CERTIFY	1	213.2500	EA
80	3LONGHORNH526-1H526-1BB-19	HOSE ASSY W/SCO 3" X 19' OAL GATES LONGHORN PET. HOSE C/W FEMALE X FEMALE SCOVILL EACH END TEST AND CERTIFY	2	410.9500	EA
150	2LONGHORNH524-1H524-1BB-6.5	HOSE ASSY W/SCO 2" X 6' 6" OAL GATES LONGHORN PET. HOSE C/W FEMALE X FEMALE SCOVILL EACH END TEST AND CERTIFY	1	151.9500	EA
220	3LONGHORNH526-1H526-1BB-6.5	HOSE ASSY W/SCO 3" X 6' 6" OAL GATES LONGHORN PET. HOSE C/W FEMALE X FEMALE SCOVILL EACH END TEST AND CERTIFY	2	316.7000	EA
290	6 IS600	RED DISCH HOSE CUT TWO PIECES 24 FEET LONG & TWO 9' 6" LONG INSTALL TANK FLANGE (TF100V) 2 FEET DOWN FROM ONE END OF HOSE - APOXY FITTING IN HOSE	67.2	2.1600	FT
300	4 IS400	RED DISCH HOSE CUT ONE HOSE 24 FEET LONG & ONE 9' 6" LONG ATTACH TANK FLANGE (TF100V) 2 FEET IN FROM END OF HOSE - APOXY FITTING IN PLACE	33.6	2.1600	FT
310	HB100	1" POLY NIPPLE	14	.6000	EA
320	TF100V	1" BULKHEAD FTG	6	9.4500	EA
330	CR100		2	6.3100	FT
340	SWCV100	DIXON BRASS SWING CHECK VALVE - HORIZONTAL OR VERTICAL	6	11.8000	EA
350	NIP100-4	BANJO	6	.9700	EA
360	1 PREMDFX 250	GATES MP HOSE LENGTH OF HOSE TO BE DETERMINED LATER	1	2.2200	FT
*** TOTALS ***			EXTENDED AMOUNT	2194.79	

F.O.B.: SP,FNA,PREPAID
PAYMENT: NET 30 DAYS
TERMS:

BY:

AUTHORIZED SIGNATURE

1. Corrosion Protection

- Use non-corrosive materials
- Cathodic protections
- ~~STEEL~~ ^{STEEL} tanks w/ cathodic protection
- single or double wall tanks
- " " " Piping
- unprotected steel tanks w/ lining w/ 10 year inspection & thereafter 5 years unless cathodic protection is added

2. Spill prevention

- spill bucket on vent riser - approved bucket that is clean & dry.
- containments - must be clean & Dry
- Over Fill protection - Tanks must never be filled beyond 95%
Driver of truck & purchaser are Liable
 - 1 vent pipe Float valves are poor protection
 - 2 use 95% shut off drop tubes
 - 3 Automatic Tank gauge w/ over fill alarm audible to driver at drop protection
90% level for alarm set point ¹⁰⁻¹⁵ Alarm time
95% level for High High set point
constant alarm as long level above 95%

UST COMPLIANCE RULES

Oregon Department of Environmental Quality
Underground Storage Tank Program
OAR Chapter 340, Division 150



State of Oregon
Department of
Environmental
Quality

Land Quality Division

Underground Storage
Tank Program

811 SW Sixth Ave.
Portland, OR 97204
Phone: (800) 742-7878
Fax: (503) 229-6954
www.deq.state.or.us



Printed 2/26/03

Oregon Department of Environmental Quality Adopts Revised UST Rules

On January 30, 2003, the Environmental Quality Commission approved revisions to the rules pertaining to underground storage tanks (USTs) in Oregon. These rules were officially filed with the Secretary of State's Office on February 14, 2003, and became effective on that date.

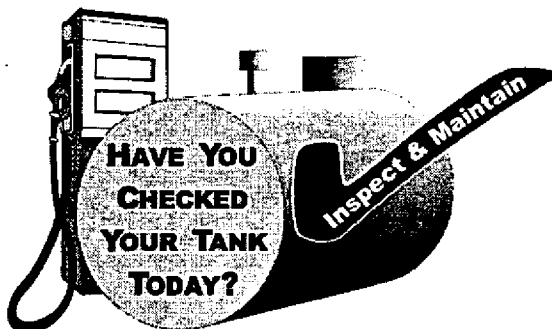
These regulations are applicable to all owners and permittees of regulated USTs (not including heating oil tanks). Federal regulations promulgated by the Environmental Protection Agency that were previously adopted by the Department of Environmental Quality have been incorporated into Oregon Administrative Rules. Requirements for Financial Responsibility (insurance) for petroleum USTs are included in a new Division 151.

This version of the regulations has certain new provisions highlighted for the reader's convenience. However, owners, permittees and licensed UST service providers should read and be familiar with all sections that pertain to their UST system or occupation. The two significant new requirements specified by the 2001 Legislature are mandatory training for UST System Operators and an expedited enforcement process (i.e., "tickets" for violations that are issued by an inspector while at the facility). The Department will provide detailed guidance information about these new programs in separate documents expected to be complete by April, 2003.

It is important to note that the majority of the revisions were made to clarify existing rule language (especially federal portions of the regulations) to make reading and understanding the rules easier for the regulated community. New requirements and *significant* changes to existing requirements are highlighted by a double-line in the left margin of the text, as shown here as an example.

Our first priorities for guidance development are for operator training and expedited enforcement. *Do you have suggestions for other topics where additional guidance would be helpful? If so, please send your written suggestions to:*

UST Compliance Program
811 SW Sixth Avenue, Portland, OR 97204
Fax: (503) 229-6954 or Email: tanks.info@deq.state.or.us



DIVISION 150

UNDERGROUND STORAGE TANK RULES

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340-150-0001

Purpose

- (1) The purpose of these rules is:
 - (a) To provide for the regulation of underground storage tanks (USTs) to protect the public health, safety, welfare and the environment from the potential harmful effects of spills and releases from underground tanks used to store regulated substances;
 - (b) To prevent releases due to structural failure, system leaks, corrosion, spills and overfills for as long as an UST system is used to store regulated substances;
 - (c) To promote the proper operation and maintenance of UST systems through training of UST facility personnel and expedited enforcement of violations; and
 - (d) To obtain state program approval to manage underground storage tanks in Oregon in lieu of the federal program, as required by ORS 466.720.

340-150-0006

Applicability and General Requirements

- (1) An owner and permittee of an UST system as defined by OAR 340-150-0010(84) must comply with this division, except to the extent exempted or deferred by OAR 340-150-0008 or limited by 340-150-0135(8).
- (2) An owner and permittee of an UST system must apply to the department for a general permit registration certificate under OAR 340-150-0020 if the UST system:
 - (a) Is in operation on or after May 1, 1988;
 - (b) Was taken out of operation between January 1, 1974, and May 1, 1988, and not permanently closed by a method that meets the requirements of OAR 340-150-0168(4); or
 - (c) Was taken out of operation before January 1, 1974, but still contains a regulated substance (i.e., the UST is not empty).
- (3) Each chamber or compartment of a multichamber or multicompartment UST is an individual tank for the purpose of OAR chapter 340, divisions 150 and 151.

[Note: Throughout this division, the term "owner and permittee" is used to denote joint responsibility for compliance. Where the owner and permittee are different, compliance by either will be deemed compliance by both.]

340-150-0008

Exemptions and Deferrals

- (1) An owner of an UST located on Indian lands, as defined in 18 U.S.C. Subpart 1151, is exempt from OAR chapter 340, divisions 150 and 151.
- (2) Heating oil tanks are exempt from OAR chapter 340, divisions 150 and 151, but the heating oil tank owner must comply with the requirements of ORS 466.858 through 466.882 and OAR chapter 340, division 177.
- (3) An owner of the following types of USTs and any connected piping is exempt from the requirements of OAR chapter 340, divisions 150 and 151:
 - (a) Farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes (i.e., not for resale);
 - (b) Septic tanks;
 - (c) Pipeline facilities (including gathering lines) that are:
 - (A) Regulated under the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.);
 - (B) Regulated under the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.); or
 - (C) Intrastate pipeline facilities regulated under state laws comparable to the provisions of the law referred to in paragraph (A) or (B) of this subsection.
 - (d) Surface impoundments, pits, ponds or lagoons;
 - (e) Storm water or wastewater collection systems;
 - (f) Flow-through process tanks;
 - (g) Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
 - (h) Storage tanks situated in an underground area (such as a basement, cellar, mine-working, drift, shaft or tunnel) if the storage tank is situated upon or above the surface of the floor;
 - (i) UST systems holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act (SWDA) or a mixture of such hazardous waste and other regulated substances;
 - (j) Wastewater treatment tank systems that are part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;
 - (k) Equipment or machinery that contains regulated substances for operational purposes, such as hydraulic lift tanks and

electrical equipment tanks;

(l) UST systems with a capacity of 110 gallons or less;

(m) UST systems that have never contained more than a "de minimis" concentration of regulated substances; and

(n) Emergency spill or overflow containment UST systems that are expeditiously (i.e., as soon as practicable after emergency has been abated) emptied after use.

(4) The following UST systems are deferred from the requirements of this division, except owners must comply with the conditions of sections (5) and (6) of this rule:

(a) Wastewater treatment tank systems;

(b) UST systems containing radioactive materials that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 and following);

(c) UST systems that are part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 40 CFR 50 Appendix A;

(d) Airport hydrant fuel distribution systems; and

(e) UST systems with field constructed tanks.

(5) A person may not install an UST system listed in section (4) of this rule for the purpose of storing regulated substances unless the UST system (whether of single- or double wall construction):

(a) Will prevent releases due to corrosion or structural failure for the operational life of the UST system;

(b) Is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a noncorrodible material or designed in a manner to prevent the release or threatened release of any stored substance; and

(c) Is constructed or lined with material that is compatible with the stored substance.

(6) An owner of any UST system listed in section (4) of this rule must conduct corrective action in the event of a release from the system.

(7) An owner may use The National Association of Corrosion Engineers Standard Recommended Practice RP0285, "Control of External Corrosion on Metallic Buried, Partially Buried or Submerged Liquid Storage Systems," (2002) as guidance for complying with sections (4) and (5) of this rule.

340-150-0010

Definitions

For the purpose of this division and as applicable for OAR chapter 340, divisions 151 and 160, the following definitions apply:

(1) "*Ancillary equipment*" means any devices including, but not limited to, connected piping, fittings, flanges, valves and pumps used to distribute, meter or control the flow of regulated substances to and from an UST.

(2) "*As built drawing*" or "*as built*" means a line drawing to-scale that accurately illustrates the location of USTs, underground piping and all related equipment in relation to buildings or other structures at an UST facility and provides thorough construction documentation. Other terms used in lieu of "*as built*" are "record drawing" or "measured drawing", which indicate that the drawing is for an existing structure or UST system.

(3) "*Cathodic protection*" means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, an UST system can be cathodically protected through the application of either galvanic anodes or impressed current.

(4) "*Cathodic protection tester*" means a person who demonstrates an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged underground metal piping and tank equipment.

(5) "*CERCLA*" means the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

(6) "*Change-in-service*" means to transfer an UST system containing a regulated substance from regulated status (i.e., subject to the requirements of this division) to nonregulated status while the UST remains in its original location.

(7) "*Closure*" means to permanently decommission an UST (by removal, filling in-place with an inert material or change-in-service) or to temporarily remove an UST from operation.

(8) "*Commission*" means the Oregon Environmental Quality Commission.

(9) "*Compatible*" means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the UST system under conditions likely to be encountered in the UST.

(10) "*Confirmed release*" means:

(a) For petroleum. Contamination observed in soil or groundwater as a sheen, stain or petroleum odor or petroleum contamination detected in soil by the Northwest Total Petroleum Hydrocarbon Identification Analytical Method (NWTPH-HCID, DEQ, December 1996) or detected in groundwater by any appropriate analytical method specified in OAR 340-122-0218; or

(b) For hazardous substances other than petroleum. Contamination observed in soil or groundwater as a sheen, stain or identifiable odor or as detected in soil, surface water or groundwater by any appropriate analytical method specified in "Test Methods for Evaluating Solid Waste," SW-846, 3rd Edition, Revised May 1997 (U.S. Environmental Protection Agency).

(11) "*Connected piping*" means all piping located beneath the surface of the ground including valves, elbows, joints, flanges and flexible connectors attached to an UST system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

(12) "*Corrective action*" means remedial action taken to protect the present or future public health, safety, welfare or the environment from a release of a regulated substance. "*Corrective action*" includes but is not limited to:

(a) The prevention, elimination, removal, abatement, control, investigation, assessment, evaluation or monitoring of a hazard or potential hazard or threat, including migration of a regulated substance; or

(b) Transportation, storage, treatment or disposal of a regulated substance or contaminated material from a site.

(13) "*Corrosion expert*" means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged underground metal piping systems and metal tanks. Corrosion experts must be accredited or certified by NACE (National Association of Corrosion Engineers) and licensed by the department under OAR chapter 340, division 160.

(14) "*Decommission*" means temporary or permanent closure, including temporary or permanent removal from operation, filling in-place, removal from the ground or change-in-service to a nonregulated status.

(15) "*Deferred*" means an UST system that may be subject to state or federal regulation at some point in the future.

(16) "*De minimis*" means an insignificant amount of regulated substance (e.g., meets the definition of "*empty*") or is less than a reportable quantity as defined under CERCLA.

(17) "*Department*" means the Oregon Department of Environmental Quality.

(18) "*Dielectric material*" means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate an UST system from the surrounding soils. Dielectric bushings are used to electrically isolate portions of an UST system (e.g., the tank from underground piping).

(19) "*Dispenser*" means a device that is used for the delivery of a regulated substance from an UST (e.g., fuel from an UST to a motor vehicle). The term includes associated metering, delivery mechanisms and other equipment contained inside a housing unit for the dispenser.

(20) "*Distributor*" means a person who is engaged in the business of selling regulated substances to an owner or permittee of an UST.

(21) "*Electrical equipment*" means equipment that is beneath the surface of the ground and contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

(22) "*Emergency generator*" means an engine that uses fuel (regulated substance) to produce auxiliary electrical or mechanical energy for use in emergencies.

(23) "*Empty*" means that all materials have been removed using commonly employed practices so that no more than one inch (2.5 centimeters) of residue or 0.3 percent by weight of the total capacity of the tank remain in the UST system.

(24) "*Excavation zone*" means an area containing an UST system and backfill material bounded by the ground surface, walls and floor of the pit and trenches into which the UST system is placed at the time of installation.

(25) "*Farm tank*" means a tank located on a tract of land devoted to the production of crops or raising animals, including fish and associated residences and improvements. A farm tank must be located on the farm property. "Farm" includes fish hatcheries, rangeland and nurseries with growing operations.

(26) "*Fee*" means a fixed charge or service charge.

(27) "*Field constructed tank*" means an UST that is constructed at the location it will be installed rather than factory-built.

(28) "*Field penalty*" means a civil penalty amount assessed in a field citation.

(29) "*Flow-through process tank*" means a tank that forms an integral part of a production process through which there is a steady, variable, recurring or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials before their introduction into the production process or for the storage of finished products or by-products from the production process.

(30) "*Free product*" means a regulated substance that is present as a nonaqueous phase liquid (e.g., liquid not dissolved in water).

(31) "*Gathering lines*" means any pipeline, equipment, facility or building used in the transportation of oil or gas during oil or gas production or gathering operations.

(32) "*General permit*" means a permit issued for a category of UST activities (e.g., installing, decommissioning or operating an UST) in lieu of individual permits developed for each UST facility.

(33) "*Hazardous substance UST system*" means an UST system that contains a hazardous substance defined in section

101(14) of CERCLA or any mixture of such substances and petroleum and which is not a petroleum UST system (but not including any substance regulated as a hazardous waste under Subtitle C of the SWDA).

(34) "*Heating oil*" means petroleum that is No. 1, No. 2, No. 4--light, No. 4--heavy, No. 5--light, No. 5--heavy and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers or furnaces.

(35) "*Heating oil tank*" means a tank used for storing heating oil for consumptive use on the premises where stored (i.e., the tank is located on the same property where the stored heating oil is used).

(36) "*Hydraulic lift tank*" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators and other similar devices.

(37) "*Install*" or "*installation*" means the physical construction of an UST system, including, but not limited to, activities such as excavating, backfilling, testing, placement of the tank, underground piping, release detection devices, corrosion protection systems, spill and overfill devices and any associated administrative activities such as notifications, record keeping and record submissions.

(38) "*Interstitial*" means the space between the primary and secondary containment systems (i.e., the space between the inner and outer walls of a tank or pipe).

(39) "*Investigation*" means monitoring, surveying, testing, sampling, analyzing or other information gathering techniques.

(40) "*Leak*" has the same meaning as "*release*" as defined by OAR 340-150-0010(63).

(41) "*Liquid traps*" means sumps, well cellars and other traps used in association with oil and gas production, gathering and extraction operations (including gas production plants), for the purpose of collecting oil, water and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream or may collect and separate liquids from a gas stream.

(42) "*Maintenance*" means the normal operational upkeep to prevent an UST system from releasing a regulated substance or to ensure that a release is detected.

(43) "*Modification*" means to change an UST system currently in use by the installation of new UST system components. This includes, but is not limited to, the addition of corrosion protection to a previously lined tank, installation of new underground piping or replacement of existing underground piping, changing the primary release detection method to one of the methods listed in OAR 340-150-0450 through 340-150-0470 or adding secondary containment. "*Modification*" does not include those activities defined as "*repair*" or "*replacement*".

(44) "*Motor fuel*" means petroleum or a petroleum based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel or any grade of gasohol and is typically used in the operation of a motor engine.

(45) "*Multichamber*" or "*multicompartment*" means an UST that contains two or more chambers or compartments created by the presence of an interior wall so that two or more regulated substances can be stored at the same time within a single tank shell. Even if the same regulated substance is stored in all chambers or compartments, the UST is a multichambered or multicompartimented UST for the purpose of these rules.

(46) "*Native soil*" means the soil outside of the immediate boundaries of the pit that was originally excavated for the purpose of installing an UST.

(47) "*OAR*" means Oregon Administrative Rule.

(48) "*Operate*" or "*operation*" means depositing a regulated substance into an UST, storing a regulated substance in or dispensing a regulated substance from an UST and such other activities, including, but not limited to, performing release detection, maintaining corrosion protection, preventing spills and overfills, investigating and confirming suspected releases, conducting maintenance, additions, modifications, replacements and repairs of equipment, maintaining a financial responsibility mechanism and keeping and submitting records on the UST and underground pipings' performance.

(49) "*Operational life*" means the period beginning when installation of the UST system has commenced until the time the UST system is permanently closed.

(50) "*ORS*" means Oregon Revised Statute.

(51) "*Owner*" means a person who currently owns an UST or owned an UST during the tank's operational life, including:

(a) In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use or dispensing of regulated substances; and

(b) In the case of an UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use.

(52) "*Permittee*" means the owner or person designated by the owner, who is in control of or has responsibility for daily UST system operation and maintenance, financial responsibility and UST operator training requirements under a general permit pursuant to OAR 340-150-0160 through 340-150-0168.

(53) "*Person*" means an individual, trust, firm, joint stock company, corporation, partnership, joint venture, consortium,

association, state, municipality, commission, political subdivision of a state or any interstate body, any commercial entity or the federal government or any agency of the federal government.

(54) "*Petroleum*" or "*oil*" means gasoline, crude oil, fuel oil, diesel oil, lubricating oil, oil sludge, oil refuse and crude oil fractions and refined petroleum fractions, including gasoline, kerosene, heating oils, diesel fuels and any other petroleum-related product or waste or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and a pressure of 14.7 pounds per square inch absolute. "*Petroleum*" does not include any substance identified as a hazardous waste under 40 CFR Part 261.

(55) "*Petroleum UST system*" means an UST system that contains petroleum or a mixture of petroleum with *de minimis* quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents and used oils.

(56) "*Pipe*" or "*piping*" means a hollow cylinder or tubular conduit that is constructed of nonearthen materials.

(57) "*Pipeline facilities*" (including gathering lines) means new and existing pipe rights-of-way and any associated equipment, facilities or buildings.

(58) "*Probability of detection*" means the likelihood, expressed as a percentage, that a test method will correctly identify a release from an UST system.

(59) "*Probability of false alarm*" means the likelihood, expressed as a percentage, that a test method will incorrectly identify an UST system as leaking when a release is not occurring.

(60) "*Property owner*" means the legal owner of the real property on which an UST is located.

(61) "*Registration certificate*" means a document issued by the department that authorizes a person to install, operate or decommission an UST system under a general permit pursuant to OAR 340-150-0160 through 340-150-0168.

(62) "*Regulated substance*" includes, but is not limited to:

(a) Any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the SWDA);

(b) Petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute); and

(c) Petroleum based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents and used oils.

(63) "*Release*" means the discharge, deposit, injection, dumping, spilling, emitting, leaking or placing of a regulated substance from an UST into the air or into or on land or the waters of the state, other than as authorized by a permit issued under state or federal law.

(64) "*Release detection*" or "*leak detection*" means determining whether a release of a regulated substance has occurred from the UST system into the environment, into the interstitial space between the UST system and its secondary barrier or into a secondary containment unit or sump around the UST.

(65) "*Repair*" means to restore any portion of an UST system that has failed, but does not include the activities defined by "*modification*" or "*replacement*".

(66) "*Replacement*" means to effect a change in any part of an UST system by exchanging one unit for a like or similar unit, but does not include activities defined as "*repair*" or "*modification*".

(67) "*Residential tank*" means a tank located on property used primarily for single family dwelling purposes.

(68) "*Septic tank*" means a watertight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

(69) "*Service provider*" means a person licensed by the department to offer to perform or perform UST services on USTs regulated under OAR chapter 340, division 150.

(70) "*Storm water*" or "*wastewater collection system*" means piping, pumps, conduits and any other equipment necessary to collect and transport the flow of surface water run off resulting from precipitation or domestic, commercial or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

(71) "*Supervisor*" means an individual licensed by the department to direct and oversee specific UST services.

(72) "*Surface impoundment*" means a natural topographic depression, human-made excavation or diked area formed primarily of earthen materials (although it may be lined with human-made materials) that is not an injection well.

(73) "*Suspected release*" has the same meaning as described in OAR 340-150-0500.

(74) "*Tank*" means a stationary device designed to contain an accumulation of regulated substances and is constructed of nonearthen materials (e.g., concrete, steel, plastic) that provide structural support.

(75) "*Tank tightness testing*" means a method used to determine if an UST is leaking and is used to supplement another

release detection method (such as inventory control or manual tank gauging) and to verify a suspected release when another method indicates a failure.

(76) "*Temporary closure*" means a halt in operation activities of an UST system for a limited time where the UST system will be brought back into operation or permanently decommissioned at some future date. For example, an UST may be temporarily closed due to corrective action activities on site, abandonment by the owner and permittee, bankruptcy proceedings, failure to maintain a financial responsibility mechanism, sale in progress or for any other reason that a permittee may choose to stop operating the UST. The term applies to an UST system that meets the definition of "*temporary closure*" whether or not the department has issued a registration certificate for this activity to the owner and permittee.

(77) "*Testing*" means applying a method to determine the integrity or operational status of any part of an UST system.

(78) "*Third party evaluation*" means an evaluation of a method or system including, but not limited to, a release detection system or tank integrity assessment method that is conducted by an independent organization. The evaluation includes certification that the method evaluated will operate as designed and includes information about any limitations of the method. As used in this definition, "independent" means that the organization that conducted the evaluation may not be owned, controlled by or associated with any client, industry organization or any other institution with a financial interest in the method or system evaluated.

(79) "*Underground area*" means an underground room, such as a basement, cellar, shaft or vault that provides enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

(80) "*Underground piping*" means connected piping that is located beneath the surface of the ground.

(81) "*Underground storage tank*" or "*UST*" means any one or combination of tanks (including connected underground pipes) that is used to contain an accumulation of regulated substances and the volume of which (including the volume of connected underground pipes) is 10 percent or more beneath the surface of the ground.

(82) "*UST facility*" means the real property on which an UST is installed or will be installed. An UST facility encompasses all contiguous real property owned by the same property owner that is associated with the operation of the UST system.

(83) "*UST services*" includes without limitation, installation, decommissioning, modification, testing (e.g., cathodic protection and tank tightness) and inspection of UST systems.

(84) "*UST system*" means an underground storage tank, underground piping, underground ancillary equipment and containment system, if any.

(85) "*UST system operator*" means the individual designated by the owner and permittee as having control of or responsibility for the operation of an UST system, including the on-site operation and maintenance of the system in a manner to ensure that the UST system is in compliance with applicable state and federal regulations and industry standards.

(86) "*Wastewater treatment tank*" means a tank that is designed to receive and treat influent wastewater through physical, chemical or biological methods.

340-150-0020

UST General Permit Registration Certificate Required

(1) A person may not install, operate or decommission an UST without applying for and being issued a registration certificate from the department for one of the following UST general permit registration categories:

- (a) Installation;
- (b) Operation; or
- (c) Decommissioning, including temporary and permanent closure by change-in-service, removal or filling in-place.

(2) An owner or proposed permittee must submit an application to the department at least 30 days before installing, operating or decommissioning an UST. The application must include, but is not limited to, the following information and attachments:

- (a) The legal name, signature and mailing address of the owner of the UST;
- (b) The legal name, signature and mailing address of the owner of the real property on which the UST system is located;
- (c) The legal name, signature and mailing address of the permittee.

(A) The owner must designate a specific person as the permittee. If the person designated is a corporation, a contact person must be identified; or

(B) If a permittee is not designated, the owner is the permittee.

(d) A completed EPA Notification for Underground Storage Tanks or equivalent form developed by the department; and

(e) A signed statement by the owner or proposed permittee that the owner or permittee (must identify which one) will comply with the financial responsibility requirements of OAR chapter 340, division 151 before operation of the UST system.

(3) The owner or proposed permittee must include the appropriate registration fee with the application in accordance with OAR 340-150-0110(1) and (6) for an *installation certificate* for new USTs to be installed or 340-150-0110(5) for an *operation or decommissioning certificate* for USTs that should have been registered previously.

(4) An application that is incomplete, unsigned or that does not include the required attachments or fees will be returned

to the owner or proposed permittee for completion. The application will be considered to be withdrawn if the required information is not submitted within 90 days of the date that the application was returned by the department.

(5) If the department determines that a general permit is not required, the owner and proposed permittee will be notified in writing and any fees submitted will be refunded. This notification constitutes final action by the department on the application.

(6) When an application is determined to be complete, the UST facility and each individual UST will be assigned a unique identification number (i.e., UST facility ID number and tank permit number) by the department.

(7) A general permit registration certificate is issued to the permittee for each UST facility. In all cases, the permittee must comply with the general permit requirements whether or not an actual registration certificate is issued.

(8) For the purpose of this rule only, the term "legal name" means the business name registered with the Oregon Secretary of State's Office, Corporation Division (if registered) or full name of an individual.

340-150-0021

Termination of Temporary Permits

Any owner or permittee holding a temporary permit to operate an UST on or before December 22, 1998, who was not issued an *operation certificate* by the department by December 23, 1998, must decommission the UST under a general permit for temporary closure, permanent closure or change-in-service pursuant to OAR 340-150-0166 through 340-150-0168.

340-150-0052

Modification of Registration Certificates

(1) A new owner or proposed new permittee must submit an UST general permit registration modification application to the department if any of the following occur:

- (a) Change of ownership of property on which an UST system is located;
- (b) Change in UST ownership; or
- (c) Change in the designated permittee.

(2) The modification application must be signed by the owner, permittee and property owner. The new owner or permittee must submit an application to the department promptly upon confirmation that the change has been legally documented (i.e., property sale is complete). Failure to submit the required modification application will result in termination of the *operation certificate* in accordance with OAR 340-150-0102(1).

(3) The modification application must include a copy of the financial assistance mechanism (e.g., insurance certificate or endorsement, trust fund, etc.) that demonstrates compliance with the requirements of OAR chapter 340, division 151.

(4) A \$75 general permit modification fee must accompany the modification application. Checks or money orders must be payable to the Department of Environmental Quality.

(5) A new *operation certificate* will be issued to the permittee upon receipt of all required information and payment of the fee.

340-150-0080

Denial, Suspension or Revocation of General Permit Registration Certificates

(1) An UST general permit registration certificate may be denied, suspended or revoked:

- (a) If there was a material misrepresentation or false statement in the application; or
- (b) If the UST system operation, maintenance, installation or decommissioning does not comply with the provisions of OAR chapter 340, divisions 150 or 151, applicable statutes, rules or department order.

(2) The provisions of ORS 183.310 to 183.550 for a contested case proceeding apply to the denial, suspension or revocation of a general permit registration certificate.

340-150-0102

Termination of Registration Certificates

(1) A general permit registration certificate will automatically terminate 120 days after any of the changes set forth in OAR 340-150-0052 have occurred, unless the department has received an application for modification.

(2) An *installation certificate* will automatically terminate when the department issues an *operation certificate*.

(3) An *operation certificate* will automatically terminate:

- (a) When the department issues a *temporary closure certificate*;
- (b) On the date that temporary closure occurred or is discovered by the department if a *temporary closure certificate* has not been issued; or
- (c) On the date change-in-service or permanent closure begins.

(4) A *temporary closure certificate* will automatically terminate upon completion of all change-in-service or permanent closure requirements or if the UST system is returned to operational status (OAR 340-150-0167(1)(b)).

340-150-0110

UST General Permit Registration, Annual Compliance and Other Fees

(1) An owner and permittee must pay a general permit registration fee for each tank. This fee must accompany the UST general permit registration application. The registration fee is the same amount as the annual compliance fee listed in section (2) of this rule.

(2) Each calendar year (January 1 to December 31) following installation, the owner and permittee must pay an annual compliance fee for each UST that has not been permanently decommissioned, for any portion of the year, according to the following schedule:

(a) \$25 per tank for the years 1988, 1989, 1990, 1991, 1992 and 1993;

(b) \$35 per tank for the years 1994, 1995, 1996 and 1997;

(c) \$60 per tank for the years 1998, 1999, 2000 and 2001, except that for 1998 and 1999 the fee is \$35 for any permittee that self-certifies its compliance with 1998 technical standards to the department;

(d) \$105 per tank for 2002, which includes a \$20 surcharge per tank; and

(e) \$85 per tank for the years 2003, 2004 and 2005.

(3) For multichambered or multicompartimented USTs, the general permit registration fee and annual compliance fee must be paid for each chamber or compartment.

(4) The department will issue an invoice to each permittee for the annual compliance fees due for each UST facility for each calendar year. The permittee must pay fees by the due date listed on the invoice. A \$35 late fee will be added to the total amount due for each invoice for which payment is not received by the due date. At its discretion, the department may allow the permittee to make alternative arrangements for payment.

(5) For any UST that was not permitted by May 1, 1988, or that was not permitted before installation during any year thereafter, the owner and permittee must pay the annual compliance fee for each calendar year or part of a calendar year since installation, except that the total amount of fees owed will not be more than \$500 per tank. These fees must be paid before the department will approve a 30-day or 3-day notice to decommission the UST.

(6) In addition to the general permit registration fee, an owner and permittee must pay a \$400 installation fee for each UST installed. This fee must be included with the general permit registration application.

(7) All checks or money orders for fees must be made payable to the Department of Environmental Quality.

340-150-0135

General Requirements for Owners, Permittees and UST System Operators

(1) The permittee must designate a specific person as the UST system operator. If an UST system operator is not designated, the permittee is the UST system operator.

(2) The property owner, UST owner and permittee must allow any department employee or authorized representative of the department access to property where an UST is located at any reasonable time to interview persons, inspect equipment and site conditions, collect samples, take still or video pictures, conduct an investigation or review and copy records.

(3) An owner and permittee of a petroleum UST system subject to this division must continuously comply with the financial responsibility requirements of OAR chapter 340, division 151.

(4) An owner and permittee must provide information regarding an UST system, UST facility or UST system operator to the department upon request.

(5) An owner and permittee must notify the department in writing within 30 days of any of the following:

(a) A change in contents of an UST as listed on the *operation certificate* from one regulated substance to another (e.g., gasoline to diesel);

(b) A change in the name of the contact person for the permittee, if the permittee has not changed;

(c) A change in the mailing address or phone number of the property owner, owner or permittee; and

(d) A decision by the owner and permittee to place any UST system into temporary closure status.

(6) Upon receipt of any information submitted in accordance with section (5) of this rule, the department may issue a modified *operation certificate* or a *temporary closure certificate*. The \$75 registration certificate modification fee is not applicable unless these changes are reported to the department at the same time as a change specified under OAR 340-150-0052.

(7) An owner and permittee of an UST system subject to this division must also comply with the following release reporting, site investigation and corrective action requirements:

(a) OAR 340-122-0205 through 340-122-0360 for petroleum USTs.

(b) OAR 340-122-0010 through 340-122-0115 for USTs containing nonpetroleum regulated substances, except that any releases must be reported in accordance with the requirements of OAR chapter 340, division 142.

(8) An owner and permittee of any UST system used solely to contain fuel for emergency power generators must comply with all provisions of this division, except for the release detection requirements of OAR 340-150-0400 through 340-150-

0470 and the training and emergency response information requirements of 340-150-0200.

(9) In addition to any other requirements of this division, an owner and permittee must decommission any UST system that does not meet the requirements of this division in accordance with the general permit registration requirements for permanent closure (OAR 340-150-0166 or 340-150-0168).

(10) Any notification made to the department by an owner and permittee may be made in writing sent by U.S. mail, electronic mail, facsimile or verbally by telephone provided it is received by the department by the required due date, unless otherwise specified by rule.

340-150-0140

Requirements for Sellers of USTs

(1) Any person who sells an UST must notify a proposed new owner and permittee in writing of the requirements for applying for a modified general permit *operation certificate* (OAR 340-150-0052) or a general permit *installation certificate* (340-150-0020).

(2) A former owner and permittee must transfer all documentation pertaining to the UST system to a new owner and permittee.

340-150-0150

Depositing Regulated Substances in USTs

(1) A person may not deposit or cause to be deposited a regulated substance into an UST unless the owner and permittee of the UST facility have a current *operation certificate* for the tank.

(2) Before arranging delivery of a regulated substance, an owner and permittee must provide the *operation certificate* number and the identification number for each UST to any person depositing a regulated substance into the UST.

(3) If a general permit registration certificate is revoked, suspended or terminated, an owner and permittee must provide written notice of the change in status to any person who previously deposited a regulated substance into the UST. A copy of the notice must be provided to the department.

340-150-0152

Requirements for Distributors of Regulated Substances for Deposit into USTs

(1) In addition to the requirements of OAR 340-150-0150(1), a distributor must obtain and maintain a written record of *operation certificate* numbers for every UST facility and the identification number for each UST into which it delivers a regulated substance.

(2) Upon request by the department, a distributor must provide a written record of all USTs into which it deposited a regulated substance during the past three years, regardless of whether the UST is regulated by the department. The list must include, but is not limited to, customer name delivery address, *operation certificate* number (as applicable), UST identification number and the type of regulated substance delivered.

340-150-0156

Performance of UST Services by Owners or Permittees

(1) An owner and permittee may perform UST services on their own UST if the following conditions are met:

(a) Before starting any UST services, an owner and permittee must complete the appropriate UST supervisor examination administered by a national service with a passing score for the specific UST service they propose to provide; except

(b) If the UST system equipment for corrosion protection, release detection or tightness testing has been specifically designed by the manufacturer to allow testing to be performed by a tank owner, permittee or UST system operator, an owner and permittee is not required to complete the UST supervisor test for cathodic protection or tank tightness testing.

(2) Before conducting any UST services allowed under section (1) of this rule, an owner and permittee must:

(a) Notify the department of their intent to perform UST services; and

(b) Submit a copy of the examination documentation provided by the national service company to the department for any UST services requiring examination under subsection (1)(a) of this rule.

(3) In addition to the requirements of this division, an owner and permittee performing work on their own UST must comply with all applicable requirements for service providers and supervisors in accordance with OAR chapter 340, division 160, except the department will waive the requirement to obtain a license and pay license fees.

340-150-0160

General Permit Requirements for Installing an UST System

(1) To maintain compliance with a general permit *installation certificate*, the permittee must:

(a) Install all UST system components and ancillary equipment in accordance with the following performance standards and requirements:

- (A) For installation of USTs and underground piping, OAR 340-150-0300 and 340-150-0302;
- (B) For spill and overfill protection, OAR 340-150-0310;
- (C) For corrosion protection, OAR 340-150-0320 and 340-150-0325; and
- (D) For release detection, OAR 340-150-0400 through 340-150-0470.
- (b) Allow the department access to the UST facility and records (OAR 340-150-0135(2));
- (c) Provide information to the department upon request and submit information regarding UST system or UST facility changes (OAR 340-150-0135(4) and (5));
- (d) Comply with all installation notification and written report requirements (OAR 340-150-0300); and
- (e) Not allow any person other than a service provider or supervisor licensed by the department to perform UST installation services, except as provided by OAR 340-150-0156.
- (2) Notwithstanding OAR 340-150-0150(1), the department may, at its discretion, approve the deposit of a regulated substance into the UST before the issuance of an *operation certificate* on a case by case basis. Dispensing of a regulated substance from the UST is strictly prohibited. Following approval by the department, the permittee must:
 - (a) Provide the distributor of the regulated substance with the *installation certificate* number and UST identification number for each tank, including an explanation that the certificate number will be superseded by an *operation certificate* number (OAR 340-150-0150(2));
 - (b) Report, investigate and perform corrective action for any confirmed release that may occur after delivery of a regulated substance (OAR 340-150-0135(7)); and
 - (c) Provide proof of compliance with the financial responsibility requirements of OAR chapter 340, division 151 to the department before accepting delivery of petroleum (OAR 340-150-0135(3)).
- (3) The UST system installation will be considered complete upon final review and approval by the department of the completed installation checklist and certification of compliance signed by the owner, permittee and service provider (i.e., the tank installer) as required by OAR 340-150-0300(8). An *operation certificate* will be issued to the permittee once the installation has been approved by the department.
- (4) The *installation certificate* automatically expires upon issuance of an *operation certificate* (OAR 340-150-0102(2)).

340-150-0163

General Permit Requirements for Operating an UST System

- (1) An *operation certificate* will be issued to the permittee upon approval by the department of the UST installation and receipt of proof of compliance with the financial responsibility requirements of OAR chapter 340, division 151 for petroleum USTs. Delivery and deposit of a regulated substance is allowed under the *operation certificate*, once the permittee has provided the distributor with the *operation certificate* number and UST identification number for each tank.
 - (2) To maintain compliance with the general permit *operation certificate*, the permittee must operate and maintain the UST system in accordance with the following performance standards and requirements:
 - (a) Prevent spills and overfills (OAR 340-150-0310);
 - (b) Maintain corrosion protection, including testing, record keeping and reporting of test failures (OAR 340-150-0320 and 340-150-0325);
 - (c) Perform release detection for USTs and underground piping, including monitoring, testing and record keeping (OAR 340-150-0400 through 340-150-0470);
 - (d) Periodically inspect internally lined USTs and report to the department any inspection failures (OAR 340-150-0360);
 - (e) Report to the department any suspected release of regulated substances within 24 hours (OAR 340-150-0500) and investigate suspected releases within seven days (340-150-0510);
 - (f) Report to the department any spills, overfills or confirmed releases within 24 hours and investigate or take corrective action as required by:
 - (A) OAR 340-122-0205 through 340-122-0360 for petroleum USTs.
 - (B) OAR 340-122-0010 through 340-122-0115 for USTs containing nonpetroleum regulated substances, except that releases must be reported in accordance with the requirements of OAR chapter 340, division 142.
 - (g) Repair, modify or replace UST system components as necessary to correct, detect or prevent releases (OAR 340-150-0350 through 340-150-0354);
 - (h) Continuously maintain a financial responsibility mechanism for petroleum UST systems (OAR chapter 340, division 151);
 - (i) Allow the department access to the UST facility and records (OAR 340-150-0135(2));
 - (j) Provide information to the department upon request and submit information regarding UST system or UST facility changes (OAR 340-150-0135(4) and (5));
 - (k) Pay all annual compliance fee invoices by the specified due date or be subject to late fees (OAR 340-150-0110);
 - (l) Report to the department any change in ownership of the property, tank or designated permittee (OAR 340-150-0052).
- Failure to submit a request for modification is cause for automatic termination of the *operation certificate* (OAR 340-150-

0102(1)); and

(m) Not allow any person other than a service provider or supervisor licensed by the department to perform UST services, except as provided by OAR 340-150-0156.

(3) The permittee must have a designated UST system operator and comply with the training requirements of OAR 340-150-0200 after the required date.

(4) The permittee may not operate an UST that does not meet the conditions and requirements of the *operation certificate* and all other applicable rules and statutes. The permittee must:

(a) Immediately take all actions necessary to bring the UST system into compliance; or

(b) Submit a 30-day notice of permanent closure to the department and immediately begin to manage the UST system in compliance with the conditions and requirements of a general permit for permanent closure in accordance with OAR 340-150-0166 or 340-150-0168.

(5) When an UST system will no longer be operated due to proposed change-in-service, temporary or permanent closure, the permittee must notify the department of the proposal in writing 30 days in advance of the change.

(6) The *operation certificate* for an UST will terminate upon issuance of a *temporary closure certificate* or when temporary closure, change-in-service or permanent closure begins (OAR 340-150-0102(3)).

340-150-0166

General Permit Requirements for Closure of an UST System by Change-in-Service

(1) A permittee may continue to use an UST system to store a nonregulated substance without removal of the tank (i.e., change-in-service). An UST or any underground piping that has held a regulated substance may not be used under any circumstances to store water for consumption by humans or livestock or for the watering of feed crops.

(2) At least 30 days before beginning the change-in-service, the permittee must submit an application for a change-in-service general permit to the department. The department may allow a shorter notice period on a case by case basis. In addition to general information about the UST facility, tank ownership and UST system, the application must include:

(a) Information about the proposed use of the UST system;

(b) A written site assessment plan that meets the requirements of OAR 340-150-0180; and

(c) Any other information the department may require.

(3) After approval of the site assessment plan by the department and at least three working days before beginning the change-in-service, the permittee must notify the department of the confirmed date and time the change-in-service will begin to allow observation by the department.

(4) A general permit registration certificate will not be issued. The permittee must, however, comply with the requirements of the general permit for decommissioning by change-in-service. In addition to all other requirements of this rule, the permittee must:

(a) Report to the department any spills, overfills or confirmed releases within 24 hours and investigate or take corrective action as required by:

(A) OAR 340-122-0205 through 340-122-0360 for petroleum USTs.

(B) OAR 340-122-0010 through 340-122-0115 for USTs containing nonpetroleum regulated substances, except that releases must be reported in accordance with the requirements of OAR chapter 340, division 142.

(b) Continuously maintain a financial responsibility mechanism for petroleum UST systems required by OAR chapter 340, division 151, until the department has determined that the change-in-service is complete;

(c) Allow the department access to the UST facility and records (OAR 340-150-0135(2));

(d) Provide information to the department upon request and submit information regarding UST system or UST facility changes (OAR 340-150-0135(4) and (5));

(e) Pay all annual compliance fee invoices by the specified due date or be subject to late fees (OAR 340-150-0110); and

(f) Not allow any person other than a service provider and supervisor licensed by the department to perform UST services, except as provided by OAR 340-150-0156.

(5) The permittee must empty the UST system and clean it by removing all liquids and accumulated sludge. The removed materials must be recycled or disposed of in accordance with all federal, state and local requirements. One or more of the following cleaning and closure procedures must be used:

(a) American Petroleum Institute RP 1604, "Closure of Underground Petroleum Storage Tanks" (1996);

(b) American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks" (2001);

(c) American Petroleum Institute RP 1631 (2001), "Interior Lining of Underground Storage Tanks" (contains guidance information); or

(d) The National Institute for Occupational Safety and Health "Criteria for a Recommended Standard: Working in Confined Space" (Publication No. 80-106, December 1979) (guidance for conducting safe closure procedures at some hazardous substance USTs).

(6) Within 30 days of completion of the field work or other period approved by the department, the permittee must

complete and submit a change-in-service checklist and site assessment report (OAR 340-150-0180(7)) signed by the owner, permittee and service provider to the department.

(7) The UST system change-in-service will be considered complete upon final review and approval by the department of the completed change-in-service checklist and site assessment report. The department will provide a letter to the permittee indicating that the change-in-service has been completed.

(8) The permittee must maintain records of change-in-service, including the site assessment report and associated documents, for three years after the change-in-service checklist and report have been approved by the department. If the UST facility is sold within this time period the permittee must provide these records to the new property owner (OAR 340-150-0140).

340-150-0167

General Permit Requirements for Temporary Closure of an UST System

(1) The department will issue a *temporary closure certificate* to the permittee upon receipt of the required notice in accordance with OAR 340-150-0135(5)(d). This certificate will expire one year from the date of issuance. Thirty days before the expiration date, the permittee must submit one of the following to the department:

- (a) An application for a change-in-service (OAR 340-150-0166) or permanent closure (340-150-0168) general permit;
- (b) A written request to return the UST system to operational status; or
- (c) A request for an extension of the expiration date of the *temporary closure certificate*.

(A) If the department approves the request for extension, the expiration period will be extended to a date determined by the department and a revised *temporary closure certificate* will be issued to the permittee.

(B) If the department denies the request, the permittee must decommission the UST system by permanent closure or change-in-service by the date established by the department. The department will notify the permittee of the denial in writing and include the reasons the request was denied.

(2) To maintain compliance with the general permit *temporary closure certificate*, the permittee must:

(a) Cap and secure all lines, pumps, access-ways and ancillary equipment, except the vent lines, if the UST system is temporarily closed for three months or more;

(b) Report suspected releases of regulated substances to the department within 24 hours (OAR 340-150-0500) and investigate suspected releases within seven days (340-150-0510);

(c) Report to the department any confirmed releases within 24 hours and investigate or take corrective action as required by:

(A) OAR 340-122-0205 through 340-122-0360 for petroleum USTs.

(B) OAR 340-122-0010 through 340-122-0115 for USTs containing nonpetroleum regulated substances, except that releases must be reported in accordance with the requirements of OAR chapter 340, division 142.

(d) Continuously maintain a financial responsibility mechanism for petroleum UST systems (OAR chapter 340, division 151);

(e) Allow the department access to the UST facility and records (OAR 340-150-0135(2));

(f) Provide information to the department upon request and submit information regarding UST system or UST facility changes (OAR 340-150-0135(4) and (5));

(g) Pay all annual compliance fee invoices by the specified due date or be subject to late fees (OAR 340-150-0110);

(h) Report to the department any change in ownership of property or tank or designated permittee (OAR 340-150-0052); and

(i) Not allow any person other than a service provider or supervisor licensed by the department to perform UST services, except as provided by OAR 340-150-0156.

(3) If the UST is empty of all regulated substances, the permittee must comply with the requirements of section (2) of this rule and must submit documentation to the department that the tank was emptied and that the removed regulated substance and sludge was recycled or disposed of in accordance with state, federal and local regulations. This documentation must be submitted with the notice provided to the department (OAR 340-150-0135(5)(d)) or within 30 days after the tank has been emptied.

(4) If the UST is not empty, the permittee must comply with the requirements of section (2) of this rule and perform release detection for USTs and underground piping, including monitoring, testing and record keeping in accordance with OAR 340-150-0400 through 340-150-0470.

(a) If the UST and underground piping are metal, the permittee must operate, test and maintain equipment and keep records for corrosion protection in accordance with OAR 340-150-0320 and 340-150-0325.

(b) If the UST is lined, the permittee must periodically inspect the lining in accordance with OAR 340-150-0360.

(c) When necessary to correct, detect or prevent releases, the permittee must repair, modify or replace UST system components (OAR 340-150-0350 through 340-150-0354).

(5) The permittee must maintain all records related to the temporary closure for three years after a change-in-service or

permanent closure checklist and site assessment report have been approved by the department. If the UST facility is sold within this time period, the permittee must provide these records to the new property owner (OAR 340-150-0140).

340-150-0168

General Permit Requirements for Decommissioning an UST System by Permanent Closure

(1) At least 30 days before beginning permanent closure, the permittee must submit an application for a permanent closure general permit to the department. The department may allow a shorter notice period on a case by case basis.

(2) If the permittee is proposing to permanently close the UST in-place and fill it with an inert material or if the UST contains a hazardous substance other than petroleum, the application must include a written site assessment plan that meets the requirements of OAR 340-150-0180. Permanent closure cannot begin until the department approves the site assessment plan.

(3) At least three working days before beginning permanent closure, the permittee must notify the department of the confirmed date and time permanent closure will begin to allow observation by the department.

(4) The permittee must empty the UST system and clean it by removing all liquids and accumulated sludge. The removed materials must be recycled or disposed of in accordance with all federal, state and local requirements. One or more of the following cleaning and closure procedures must be used:

- (a) American Petroleum Institute RP 1604, "Closure of Underground Petroleum Storage Tanks" (1996);
- (b) American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks" (2001);
- (c) American Petroleum Institute RP 1631, "Interior Lining of Underground Storage Tanks" (2001) (contains guidance information); or

(d) The National Institute for Occupational Safety and Health (NIOSH) "Criteria for a Recommended Standard: Working in Confined Space" (Publication No. 80-106, December 1979) (guidance for conducting safe closure procedures at some hazardous substance USTs).

(5) The permittee must perform a site assessment that meets the requirements of OAR 340-150-0180 after the UST system and all ancillary equipment have been removed from the tank pit. If the UST is closed in-place, the site assessment must be conducted in accordance with the approved site assessment plan. If any equipment (i.e., tanks or piping) are to be disposed of instead of recycled, the permittee must first have the disposal location approved by the department.

(6) Within 30 days of completion of the field work or other period approved by the department, the permittee must complete and submit to the department a permanent closure checklist and site assessment report (OAR 340-150-0180) signed by the owner, permittee and service provider.

(7) A general permit registration certificate will not be issued to the permittee. However, the permittee must comply with the requirements of this general permit for permanent closure. In addition to all other requirements of this rule, the permittee must:

(a) Report to the department any spills or confirmed releases within 24 hours and investigate or take corrective action as required by:

(A) OAR 340-122-0205 through 340-122-0360 for petroleum USTs.

(B) OAR 340-122-0010 through 340-122-0115 for USTs containing nonpetroleum regulated substances, except that releases must be reported in accordance with the requirements of OAR chapter 340, division 142.

(b) Continuously maintain a financial responsibility mechanism for petroleum UST systems (OAR chapter 340, division 151);

(c) Allow the department access to the UST facility and records (OAR 340-150-0135(2));

(d) Provide information to the department upon request and submit information regarding UST system or UST facility changes (OAR 340-150-0135(4) and (5));

(e) Pay all annual compliance fee invoices by the specified due date or be subject to late fees (OAR 340-150-0110); and

(f) Not allow any person other than a service provider and supervisor licensed by the department to perform UST services, except as provided by OAR 340-150-0156.

(8) The UST system permanent closure will be considered complete upon approval by the department of the completed permanent closure checklist and site assessment report (OAR 340-150-0180). The department will provide a letter to the permittee indicating that the permanent closure has been completed.

(9) The permittee must maintain records of permanent closure, including the site assessment report and associated documents, for three years after the permanent closure checklist and report have been approved. If the UST facility is sold within this time period the permittee must provide these records to the new property owner (OAR 340-150-0140).

340-150-0180

Site Assessment Requirements for Permanent Closure or Change-In-Service

(1) Before a change-in-service (OAR 340-150-0166) or permanent closure (340-150-0168) is completed, an owner and permittee must complete a site assessment to measure for the presence of a release where contamination is most likely to be

present at the UST facility and submit results of the assessment to the department. In selecting sample types, sample locations and measurement methods, an owner and permittee must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to groundwater and other factors appropriate for identifying the presence of a release.

(2) For USTs containing petroleum, the owner and permittee must measure for the presence of a release by following the sampling and analytical procedures specified in OAR 340-122-0205 through 340-122-0360 and section (4) of this rule.

(3) For USTs containing regulated substances other than petroleum (including waste oil tanks), petroleum USTs to be closed in-place and USTs to undergo a change-in-service, an owner and permittee must submit a written site assessment plan (i.e., sampling plan) to the department and receive department approval before beginning permanent closure or change-in-service. The plan must include the following information:

(a) A site diagram, drawn to scale, that identifies:

(A) The location of all USTs and underground piping, dispenser islands, buildings and nearby properties;

(B) All surface water bodies within ¼ mile of the UST facility;

(C) Any potential conduits for spreading contamination that may exist (e.g., water or sewer lines); and

(D) All proposed sample locations, clearly marked.

(b) A list of analytical procedures and sample collection methods to be used;

(c) General information about the sample collector and UST facility;

(d) The location of all proposed sampling points that meet the requirements of section (4) of this rule; and

(e) Any other information as specified by the department.

(4) Unless otherwise directed or approved by the department, an owner and permittee must meet the following requirements for sampling and analysis:

(a) Soil samples must be collected from the native soils located no more than two feet beneath the bottom of the tank pit in areas where contamination is most likely to be found;

(b) For in-place closure or change-in-service of an UST, a minimum of four soil samples must be collected, one each from beneath both ends of the tank and on each side;

(c) For the removal of a single tank, two to four soil samples must be collected as appropriate based on site conditions, including the condition of the removed tank;

(d) For the removal of multiple USTs from the same pit, in addition to subsection (c) of this section, one soil sample must be collected for each 100 square feet of area in the pit from areas where contamination is most likely to be found;

(e) For underground piping or where piping runs were located in the past:

(A) A minimum of two soil samples must be collected from the native soils directly beneath the areas where contamination is most likely to be found; and

(B) For piping runs of more than 20 feet in length, beginning at the dispensers, at least one additional soil sample must be collected at each 20-foot interval;

(f) For dispensers, at least one soil sample must be collected from the native soils directly beneath each dispenser;

(g) For UST components (e.g., underground piping or dispensers) located directly above an area to be excavated, the area must be visually assessed before excavation work is conducted and soil samples collected if contamination is observed or suspected;

(h) All soil samples must be analyzed by the Northwest Total petroleum Hydrocarbon Identification Analytical Method (NWTPH-HCID, DEQ, December 1996) specified in OAR 340-122-0218(1)(d)(A) to determine if a confirmed petroleum release exists; and

(i) If water is present in the UST pit, regardless of whether obvious contamination is present, the department must be notified within 24 hours of discovery.

(5) The guidance contained in *Appendix K* of this division may be used to comply with sections (3) and (4) of this rule.

(6) An owner and permittee must report a confirmed release to the department within 24 hours of observance or receipt of analytical results. Upon discovery of a release, an owner and permittee must:

(a) Immediately initiate corrective action. An owner and permittee may request and the department may approve a specific time schedule to initiate corrective action on a case by case basis depending on the severity of the contamination or other relevant factors; and

(b) Follow the requirements of OAR 340-122-0225 for "Initial Abatement and Site Check" and 340-122-0235 for "Free Product Removal" as appropriate.

(7) An owner and permittee must submit a written report of the results of the site assessment to the department within 30 days of completion of the field work or other period approved by the department.

340-150-0200

Training Requirements for UST System Operators and Emergency Response Information

(1) The owner and permittee of each UST facility issued an *operation certificate* by the department that dispenses a regulated substance from an UST to a motor vehicle or container must employ trained personnel who can properly operate

and maintain the UST system and must provide emergency response information to any person that dispenses a regulated substance from the UST system.

(2) UST system operator. An owner and permittee must require that the designated UST system operator complete training that meets the following requirements:

(a) An individual designated as the UST system operator before February 1, 2004, must complete one of the training options in section (4) of this rule by that date.

(b) An individual designated as the UST system operator after February 1, 2004, must complete training within 90 days of designation, unless the individual has previously completed a training option and a copy of the training documentation is maintained at the UST facility.

(c) The department may extend the initial training compliance date beyond February 1, 2004, if the department determines that there are an insufficient number of training options available.

(3) Elements of required training.

(a) All training options must include the essential training elements listed in *Appendix L* of this division and as further described in an UST system operator training manual developed by the department; and

(b) The department may periodically audit or review any of the training options to verify that the training follows the department's training manual.

(4) Training options. The UST system operator must either:

(a) Attend a training session sponsored by a training vendor listed by the department. A training vendor is a person, company or organization listed by the department that has agreed to present UST system operator training using the training manual developed by the department;

(b) Successfully pass an examination designed for UST system operators offered by a national service and approved by the department;

(c) Complete an internet or computer software training or examination program approved by the department; or

(d) Complete any other equivalent training method approved by the department.

(5) Documentation and record keeping. An owner and permittee must submit verification of UST system operator training completion to the department by March 1, 2004.

(a) Verification may include a copy of the certificate of training completion signed by the UST system operator along with any examination results or a list of persons who attend a training session as submitted by the training vendor. The list must include: the UST system operator's name and signature; the date training was completed; and the name, site address and the department's UST facility identification number for the UST facility that the UST system operator serves. The list must also include a confirmation statement by the training vendor that the training session was conducted using the department's UST system operator training manual.

(b) An owner and permittee must permanently retain each certificate of completion signed by the UST system operator on file at the UST facility, including a copy of any examination results. If training records are not kept at the UST facility, an owner and permittee must have the records available for review by the department upon request.

(6) Exemption or deferral from training. The department may exempt an owner and permittee from the training requirements for an UST system operator if an owner and permittee demonstrates to the department's satisfaction that a hardship condition exists. Additionally, the department may defer the compliance date for UST system operator training to an alternate date on a case-by-case basis for an owner and permittee who meets the requirements of this section.

(a) To be considered for an UST system operator hardship exemption or deferral, an owner and permittee must demonstrate that the following conditions exist:

(A) The owner and permittee are the same person and owns only one UST facility;

(B) The permittee is both the UST system operator and the only person regularly on site who can operate the UST system equipment; and

(C) The permittee has been unable to locate another person to operate the UST facility for the permittee for a scheduled training session date or for the amount of time needed to complete a training option.

(b) The permittee must submit a written request for a hardship exemption or deferral to the department. The request must include the following information:

(A) A brief description of how the permittee meets the requirements under subsection (a) of this section; and

(B) A list of available training options and other possible solutions explored by the permittee together with an explanation why none of these alternatives are feasible.

(c) The department will review exemption and deferral requests within 60 days of receipt of the completed request. Upon approval by the department, the permittee must review the training manual developed by the department and sign an affidavit stating that the permittee has read and understands the UST operation and maintenance requirements. The permittee must submit the affidavit to the department by March 1, 2004, or other date designated by the department.

(d) The permittee must keep a copy of all records pertaining to approval of a hardship exemption or deferral, including the signed affidavit; records must be kept permanently at the UST facility. If records are not kept at the UST facility, the

permittee must have the records available for review by the department upon request; and

(e) UST facilities where the permittee has been granted a hardship exemption will be placed on a priority list for technical assistance and inspection by the department.

(7) Emergency response information. In addition to the requirements of sections (1) through (6) of this rule, an owner and permittee must provide information about emergency response procedures, including, but not limited to, procedures for overfill protection during delivery of regulated substances, operation of emergency shut off system and alarm response, release reporting and any site specific emergency procedures. The information must include any emergency response requirements made necessary by site specific human health and safety issues or the presence of environmentally sensitive areas, such as nearby streams, wetlands or potential conduits for spreading contamination. The emergency response information must be provided by:

(a) Written instructions that are provided to any person who dispenses a regulated substance at the UST facility;

(b) Signage posted in prominent areas of the UST facility that is easily visible to any person dispensing a regulated substance; or

(c) A combination of both subsections (a) and (b) of this section.

340-150-0250

Expedited Enforcement Process

(1) Nothing in this rule shall affect the department's use of OAR chapter 340, division 12 "Enforcement Procedures and Civil Penalties" for compliance with the UST regulations, except as specifically noted. The field penalty amounts assigned in section (4) of this rule are only applicable to actions taken by the department under this rule. Nothing in this rule requires the department to assess any particular penalty amount for any particular violation.

(2) An owner and permittee is excluded from participation in the expedited enforcement process if:

(a) The total field penalty amount for all violations identified during a single inspection or file review would exceed \$300;

(b) The department documents one or more class I violation, as defined in OAR 340-012-0067(1);

(c) The department has issued a field penalty or civil penalty to the owner or permittee for the same violation at the same UST facility within the previous three years; or

(d) At its discretion, the department determines that an owner and permittee is not eligible for the expedited process. This determination will be done on a case by case basis. [One example may be when an owner and permittee of multiple UST facilities has received multiple field citations for the same or similar violations, but has not made corrections at all facilities.]

(3) For any owner and permittee with documented violations or conditions that exclude participation in the expedited enforcement process of this rule, the department will take appropriate enforcement action in accordance with OAR chapter 340, division 12.

(4) Each class II UST violation listed in OAR 340-012-0067(2) is assigned a field penalty amount of \$50, except for class II violations meeting the following circumstances, which are assigned a field penalty amount of \$75:

(a) Failure to conform to performance standards and requirements and third party evaluation and approval for UST system release detection methods by using a release detection method that does not have third party evaluation and approval;

(b) Use of a method or methods of release detection as the primary release detection method after the period allowed for such use by rule has expired;

(c) Failure to conduct required release detection monitoring and testing activities for USTs or piping by not monitoring or testing for the presence of a release every 30 days or daily as required;

(d) Failure to conduct the required release detection monitoring and testing activities for USTs by not performing a tank tightness test in accordance with required schedule for a release detection method or as necessary for confirmation of a suspected release;

(e) Failure to conduct required release detection monitoring and testing activities for USTs or piping by failing to ensure that groundwater and vapor monitoring release detection systems are functioning properly to detect a release from all portions of the system that contain a regulated substance;

(f) Failure to conform to performance standards and requirements and third party evaluation and approval for UST system release detection methods or equipment by using the manual tank gauging release detection method for an UST larger than 2,000 gallons capacity;

(g) Failure to conform to performance standards and requirements and third party evaluation and approval for UST system release detection methods or equipment by not having a line leak detection device that is operational or able to detect a leak in underground piping;

(h) Failure to conduct required corrosion protection monitoring and testing activities for USTs or piping by not conducting an inspection after the first six months of operation or subsequent tests according to schedule;

(i) Failure to conduct required corrosion protection monitoring and testing activities for USTs or piping by not conducting an initial tank integrity inspection or periodic internal lining inspections;

- (j) Failure to have an operating certificate for all compartments or chambers of a multichambered or multicompartment UST when at least one compartment or chamber has an operating certificate;
 - (k) Failure to apply for a modified operation certificate when a change in tank ownership, permittee or property owner has occurred;
 - (l) Failure to provide complete documentation to demonstrate financial responsibility coverage; and
 - (m) Failure to have a trained UST system operator for an UST facility by February 1, 2004.
- (5) Each class III violation listed in OAR 340-012-0067(3) is assigned a field penalty amount of \$50 when an owner or permittee has received prior notice of the violation through a field citation and has not corrected the violation. Any violation of UST rules that also violates a final order incorporated into a field citation may be excluded from the expedited process at the department's discretion.
- (6) An owner or permittee issued a field citation has 30 calendar days from the date of issuance to submit payment for the total field penalty amount. Payment is deemed submitted when received by the department. A check or money order in the amount of the field penalty must be submitted to: Department of Environmental Quality - Business Office, 811 SW Sixth Avenue, Portland, OR 97204. Participation in the expedited enforcement process is voluntary -- by submitting payment, the owner and permittee agree to accept the field citation as the final order by the commission and to waive any right to an appeal or any other judicial review of the determination of violation, compliance schedule or assessment of the field penalty in the field citation.

340-150-0300

Installation of USTs and Piping

- (1) An owner and permittee must have an *installation certificate* issued by the department before beginning installation of the UST (OAR 340-150-0160). The requirements and procedures for applying for an UST *installation certificate* are described in OAR 340-150-0020.
- (2) An owner and permittee must install USTs and underground piping in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions. The codes and standards listed in *Appendix A* of this division may be used to comply with the requirements of this rule.
- (3) An owner and permittee must install USTs and underground piping that are made of or lined with materials that are compatible with the substance stored in the UST system. An owner and permittee storing alcohol blends may use the codes listed in *Appendix B* of this division to comply with the requirements of this section of the rule.
- (4) An owner and permittee may only install UST systems that meet the following performance standards:
 - (a) Spill and overfill prevention equipment and requirements (OAR 340-150-0310);
 - (b) Corrosion protection performance standards for USTs and underground piping (OAR 340-150-0320); and
 - (c) Release detection performance standards (OAR 340-150-0400 through 340-150-0470).
- (5) The person installing the UST system must be licensed by the department to perform UST services (OAR chapter 340, division 160), except as provided by OAR 340-150-0156.
- (6) At least 30 days before beginning the UST system installation, an owner and permittee must provide notice to the department on an application provided by the department. The department may allow a shorter notice period on a case by case basis.
- (7) At least three working days before beginning UST installation, an owner and permittee must notify the department of the confirmed date and time the installation will begin. The department may request additional prior notifications of the start date and time of specific installation or related testing activities.
- (8) An owner and permittee must complete an installation checklist on a form provided by the department and submit the checklist to the department before an *installation certificate* can be issued. The checklist requires information about installation procedures and standards used, including any observations made by a service provider during the installation of the UST system. The checklist must include:
 - (a) A certification of compliance signed by the owner, permittee and service provider (i.e., the tank installer) that certifies the UST system was installed in accordance with required methods and standards and in compliance with requirements for cathodic protection, release detection and spill and overfill protection and that the owner and permittee will meet requirements for financial responsibility;
 - (b) One copy of the as-built drawing for the UST facility that includes the locations of all USTs, underground piping and ancillary equipment;
 - (c) A list of major UST components installed;
 - (d) All manufacturer specifications, completed checklist or other installation documents for USTs and components, including warranties;
 - (e) A copy of third party evaluation approval summaries, as applicable to any release detection equipment or methods;
 - (f) A copy of approval documents (sign-off or pressure test results) provided by the state fire marshal or local fire

department, if available; and

(g) Photographs (or color copies of photographs) of key phases of the installation, including, but not limited to, major equipment (i.e., USTs and underground piping) and materials to be used in the installation, the excavation area before placement of USTs or underground piping, installation area after the placement of USTs and underground piping, but before backfilling and any other items of interest that document the installation process. Videos, negatives, floppy disks, undeveloped film, etc. are not acceptable substitutes for standard color photographs.

(9) An *operation certificate* will be issued to the permittee in accordance with OAR 340-150-0163(1) after department review and approval of the completed installation checklist and all required documentation.

[Note 1: USTs and underground piping must be installed to meet all requirements of the Oregon Uniform Fire Code pertaining to USTs in accordance with OAR chapter 837, division 40 "Fire and Life Safety Regulations" (Department of Oregon State Police, Office of State Fire Marshal).]

[Note 2: *Appendix J* of this division includes a list of additional guidance documents that owners and permittees may find useful.]

340-150-0302

Installation of Used USTs

(1) An owner and permittee may not reuse an UST that has been installed in the ground and subsequently removed unless the UST was decommissioned in accordance with all requirements of OAR 340-150-0168.

(2) The original manufacturer must certify that the used UST meets the UST performance requirements of OAR 340-150-0300. If the original manufacturer is not available (e.g., no longer in business, unknown, etc.) another manufacturer of the same tank brand or type must certify in writing that the UST meets the current UST performance requirements.

(3) Before reinstalling the UST, an owner and permittee must have the manufacturer's recertification documented in writing and available to the department upon request.

(4) An owner and permittee must install the UST in accordance with OAR 340-150-0300 and follow all recommendations made by the manufacturer for reinstalling the used UST.

(5) An owner and permittee must submit documents showing compliance with all manufacturer recommendations including, but not limited to, warranty cards or manufacturers' checklists to the department as an attachment to the installation checklist required by OAR 340-150-0300(8)(d).

340-150-0310

Spill and Overfill Prevention Equipment and Requirements

(1) An owner and permittee must install, operate and maintain spill prevention equipment, such as a spill catchment basin or spill bucket, that will prevent the release of a regulated substance to the environment when the transfer hose is detached from the fill pipe.

(2) An owner and permittee must install, operate and maintain overfill prevention equipment and follow fill procedures that prevent any of the fittings located on top of the UST from being exposed to a regulated substance due to overfilling, and:

(a) Automatically shuts off flow into the UST when the UST is no more than 95 percent full; or

(b) Alerts the person depositing the regulated substance into the UST when the UST is no more than 90 percent full by restricting the flow into the tank or by triggering a high level alarm.

(3) For all UST systems installed or overfill equipment replaced on or after March 1, 2003, an owner and permittee must be able to provide visual verification that the overfill equipment functions as required by section (2) of this rule. For overfill equipment installed before March 1, 2003, an owner and permittee must be able to demonstrate to the department that the equipment is functions properly by any method deemed acceptable by the department.

(4) In addition to the overfill requirements of section (2) of this rule, an owner and permittee must:

(a) Measure the volume of regulated substance in each UST to confirm that the volume available is greater than the volume of the regulated substance to be deposited into the UST before each deposit is made; and

(b) Develop and implement procedures to ensure that each deposit of a regulated substance into the UST is monitored constantly to prevent overfilling and spilling.

(5) An owner and permittee may use the codes and procedures listed in *Appendix C* of this division to comply with the requirements of this rule.

(6) Spill and overfill prevention equipment is not required if the UST system is filled by deposits of a regulated substance of no more than 25 gallons at one time (a waste oil tank may be one example).

340-150-0320

Corrosion Protection Performance Standards for USTs and Piping

(1) An owner and permittee must protect all USTs (whether of single wall or multiwall construction) and underground piping that routinely contains a regulated substance from corrosion by one of the methods listed in sections (2) through (4) of this rule.

(2) For USTs and underground piping constructed of fiberglass-reinforced plastic or other nonmetallic materials, an owner and permittee must use one of the codes and standards listed in *Appendices D1-USTs* and *D2-Piping* of this division to comply with this section of the rule.

(3) An owner and permittee must provide cathodic protection for USTs and underground piping constructed of steel or other metal to prevent corrosion by using the codes and standards listed in *Appendices E1-USTs* and *E2-Piping* of this division to comply with this section of the rule. In addition, an owner and permittee must comply with subsections (a) through (c) and either (d) or (e) of this section:

(a) The UST and underground piping must be coated with a suitable dielectric material;

(b) Field-installed cathodic protection systems must be designed by a corrosion expert;

(c) Impressed current systems must be designed to allow the testing of current operating status as required by OAR 340-150-0325(3); and

(d) A permanent cathodic protection test station must be installed. The test station:

(A) Can be separate or combined with an existing box and must be located near the protected structure (e.g., UST, piping, etc.) and away from an anode;

(B) Must provide, at a minimum, an electrical connection to the structure and access for placing a reference cell in contact with the soil or backfill; and

(C) When located below the surface of the ground, the test station design must prevent run off of surface water into the soil; or

(e) If a permanent cathodic protection test station is not installed, an owner and permittee must have a written cathodic protection test procedure that has been developed in accordance with a nationally accepted code of practice. The written test procedure must:

(A) Meet each of the minimum requirements established by subsection (d) of this section;

(B) Contain sufficient detail to ensure that initial test conditions can be replicated during each test (i.e., electrical connections are made at the same points and the reference electrode contacts the soil at the same location);

(C) Be followed for all cathodic protection tests at the UST facility; and

(D) Be provided to the department upon request.

(4) For USTs constructed of a steel-fiberglass reinforced plastic composite, an owner and permittee must use one of the codes and standards listed in *Appendix F* of this division to comply with this section of the rule.

340-150-0325

Operation and Maintenance of Corrosion Protection

(1) An owner and permittee of an UST system described in OAR 340-150-0320 must operate and maintain the corrosion protection system to provide continuous protection to the metal components of any portion of the UST and underground piping that routinely contains a regulated substance.

(2) An owner and permittee must have the corrosion protection system inspected and tested for proper operation by a qualified cathodic protection tester licensed by the department (OAR chapter 340, division 160), except as provided by OAR 340-150-0156, in accordance with the following schedule:

(a) Within six months of installation; and

(b) At least once every three years thereafter.

(3) An owner and permittee of an UST system with impressed current cathodic protection systems must have the system inspected every 60 days to ensure the equipment is running properly.

(4) An owner and permittee must report all corrosion protection test failures to the department within 24 hours and submit a copy of the test results as requested by the department.

(5) An owner and permittee must conduct any repair, modification and replacement of a corrosion protection system or equipment in accordance with OAR 340-150-0350 through 340-150-0354.

(6) An owner and permittee must maintain records of the operation of the cathodic protection system to demonstrate compliance with the performance standards of this rule, including:

(a) The results of the last three impressed current cathodic protection tests required in section (3) of this rule; and

(b) The results of the last two cathodic protection inspections required in section (2) of this rule.

(7) The testing criteria used to determine that corrosion protection is effective must be performed in accordance with a code of practice developed by a nationally recognized association. An owner and permittee may use the codes listed in *Appendix G* of this division to comply with the requirements of this rule.

340-150-0350

UST System Repairs

(1) An owner and permittee of an UST system requiring repair must effect the repair such that the repair will prevent and detect releases due to structural failure or corrosion as long as the UST system is used to store a regulated substance.

(2) Metal pipe sections and fittings that have released a regulated substance as a result of corrosion or other damage cannot be repaired and must be replaced as a modification to an UST system in accordance with OAR 340-150-0352(4).

(3) Repair methods. An owner and permittee must repair UST system components according to the manufacturer's specifications and perform repairs in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory. The codes and standards listed in *Appendix H* of this division may be used to comply with this section. A manufacturer's authorized representative may make repairs to fiberglass or other nonmetallic USTs.

(4) Lined tanks. An owner and permittee of an UST that has been previously repaired or upgraded using the interior lining method may repair the UST by restoring or adding additional lining to the UST if the metal portion of the UST has been determined to be structurally sound by use of the integrity assessment (inspection) method by American Petroleum Institute Publication 1631 (2001), "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks". An owner and permittee must refer to OAR 340-150-0352 and 340-150-0360 for additional requirements for internally lined tanks. An owner and permittee must permanently decommission an UST if the integrity assessment determines that the UST is no longer structurally sound.

(5) Tanks. Before operating a repaired UST, an owner and permittee must:

(a) Have the UST tightness tested after completion of the repair and report to the department any test failures (OAR 340-150-0445); and

(b) For all repaired tanks except those repaired by lining, obtain written documentation that the original manufacturer has recertified the repaired UST as meeting current UST performance requirements (OAR 340-150-0300). If the original manufacturer is not available (e.g., no longer in business, unknown, etc.) another manufacturer of the same tank brand or type must certify in writing that the UST meets the current UST performance requirements.

(6) Piping. Before operating repaired piping, an owner and permittee must have the underground piping tightness tested after completion of the repair and report to the department any test failure (OAR 340-150-0410).

(7) Corrosion protection. An owner and permittee must have a cathodic protection system tested within six months following a repair to ensure proper operation and report to the department any test failure (OAR 340-150-0325).

(8) Spill and overflow. An owner and permittee must repair spill and overflow equipment when necessary; following repair, the spill and overflow equipment must meet the requirements of OAR 340-150-0310.

(9) Record keeping. An owner and permittee must maintain records that demonstrate compliance with the requirements of this rule for the remaining operating life of the UST system. Records must include information such as a description of the work, date performed, name and address of the company that performed the work, equipment model number (as appropriate), test results and any other related data. An owner and permittee must make all repair records available for review by the department upon request.

340-150-0352

UST System Modifications and Additions

(1) An owner and permittee must follow the requirements of this rule when making UST system modifications. For any other modifications not specifically listed, an owner and permittee must follow sections (5) through (7) of this rule.

(2) An owner and permittee of a metal UST previously protected with cathodic protection may modify the UST by the addition of internal lining if all of the following requirements are met:

(a) Before the addition of a lining, the integrity of the tank is assessed by a method that has been third party evaluated and approved on a national level (e.g., the method is on a list of approved alternative integrity assessment methods published by the Environmental Protection Agency);

(b) The lining is installed in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory; and

(c) The modifications comply with all requirements of OAR 340-150-0360(2) for internally lined tanks.

(3) An owner and permittee of an UST that has been internally lined may modify the UST by the addition of corrosion protection if all of the following requirements are met:

(a) Before the addition of corrosion protection, the integrity of the UST is assessed using the method by American Petroleum Institute Publication 1631 (2001), "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks" to ensure that the tank is structurally sound and free of corrosion holes and that the lining is still performing according to manufacturer requirements;

(b) The corrosion protection system meets the performance standards of OAR 340-150-0320(3); and

(c) The modifications comply with all requirements of OAR 340-150-0360(2) for internally lined USTs.

(4) For modification of an UST system by the addition of new piping or replacement of damaged piping, an owner and permittee must comply with the installation requirements for new UST systems (OAR 340-150-0300) and this rule.

(5) An owner and permittee may use the codes and standards listed in *Appendix H* of this division to comply with this rule.

(6) An owner and permittee must notify the department of their intent to modify an UST system at least 30 days before any modification work is scheduled to start by submitting an application for UST system modification to the department.

(a) At least three working days before beginning the modification, an owner or permittee must notify the department of the confirmed date and time the modification will begin to allow observation by the department.

(b) The owner or permittee must submit a completed UST system modification checklist to the department within 30 days after completion of the modification.

(7) An owner and permittee must maintain records that demonstrate compliance with the requirements of this rule for the remaining operating life of the UST system. Records must include a description of the work, date performed, name and address of the company that performed the work, equipment model number (as appropriate), test results, modification application and checklist and any other related data. An owner and permittee must make all records for UST system modifications and additions available for review by the department upon request.

340-150-0354

UST System Replacements

(1) An owner and permittee must replace any part of an UST system as necessary for the UST system to meet the following performance standards:

(a) Spill and overfill protection (OAR 340-150-0310);

(b) Corrosion protection (OAR 340-150-0320 and 340-150-0325); and

(c) Release detection (OAR 340-150-0400 through 340-150-0470).

(2) For the purpose of these rules, the replacement of metal pipe sections and fittings that have released a regulated substance as a result of corrosion or other damage is considered a modification and the owner and permittee must comply with OAR 340-150-0352(4) and 340-150-0300 instead of this rule.

(3) An owner and permittee must maintain records that demonstrate compliance with the requirements of this rule for the remaining operating life of the UST system. Records must include information such as a description of the work, date performed, name and address of the company that performed the work, equipment model number (as appropriate), test results and any other related data. An owner and permittee must make all records for UST system replacements available for review by the department upon request.

340-150-0360

Requirements for Internally Lined USTs

(1) Internally lined USTs without corrosion protection. An owner and permittee of an internally lined UST that does not have corrosion protection must have the UST internally inspected or assessed in accordance with a method that has been evaluated and approved by a third party to ensure the tank is structurally sound and the lining is still performing in accordance with all original design specifications. An owner and permittee must have the internal lining inspections or assessments conducted:

(a) Within ten years after lining; and

(b) Every five years thereafter.

(2) Internally lined USTs with corrosion protection. An owner and permittee of an internally lined UST that has corrosion protection must conduct internal lining inspections or assessments of the UST as required by section (1) of this rule. However, internal inspections are not required if the owner and permittee meet each of the following conditions:

(a) The integrity of the UST is inspected or assessed before the addition of corrosion protection; and

(b) Written documentation of the inspection results and the internal inspection or assessment is provided to the department that demonstrate the work was conducted in accordance with a code of practice developed by a nationally recognized association, an independent testing laboratory or by a method that has been third party evaluated and approved. If the original integrity inspection or assessment was not conducted, documentation is not available or the documentation is not sufficient as determined by the department, an owner and permittee must complete at least one internal inspection of the tank lining using the method by American Petroleum Institute Publication 1631 (2001), "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks".

(3) The owner and permittee must permanently decommission an UST system if any internal inspection determines that the UST is no longer structurally sound.

340-150-0400

General Release Detection Requirements for Petroleum UST Systems

(1) An owner and permittee of petroleum UST systems must provide a method of release detection that:

(a) Can detect a release from any portion of the UST and the underground piping that routinely contains a regulated substance;

(b) Is an approved leak detection method or equipment as listed by a national organization (e.g., the National Work Group on Leak Detection);

(c) Is installed, calibrated, operated and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition;

(d) Meets the performance requirements of this rule and the requirements of 340-150-0410 for underground piping, including any manufacturer performance claims (with the method for determining compliance with performance claims described in writing by the equipment manufacturer or installer); and

(e) Is capable of detecting the leak rate or quantity specified for that method in OAR 340-150-0450 through 340-150-0470 or 340-150-0410 for piping, with a probability of detection of at least 95 percent and a probability of false alarm of no more than 5 percent. Release detection methods permanently installed before December 22, 1990, are exempt from the requirements of this subsection.

(2) An owner and permittee must select an appropriate primary release detection method for the UST system (OAR 340-150-0420 through 340-150-0470). More than one method may be in use at an UST facility, but only one can be the primary method. The primary method must be reported to the department when an UST is installed or during an inspection by the department. The primary release detection method cannot be switched from month to month depending on which method passes daily or monthly monitoring requirements. The primary method of release detection can be changed to another method as necessary as part of a repair, modification or replacement or if the period of use for a method has expired by rule.

(3) When a release detection method indicates a release may have occurred, an owner and permittee must notify the department of a suspected release in accordance with OAR 340-150-0500.

(4) An owner and permittee must maintain records demonstrating compliance with all applicable requirements of this rule and retain the following records for as long as the release detection equipment is in use:

(a) All written performance claims pertaining to any release detection system used and the third party evaluation and approval;

(b) The results of any sampling, equipment testing or monitoring; and

(c) Written documentation of all calibration, maintenance and repair of release detection equipment permanently located on site, including any schedules of required calibration and maintenance provided by the release detection equipment manufacturer.

(5) An owner and permittee must keep release detection records either:

(a) At the UST facility and immediately available for inspection by the department; or

(b) At a readily available alternative site and provide the records for inspection by the department upon request.

(6) An owner and permittee may use the codes and standards listed in *Appendix I* of this division to comply with this rule.

340-150-0410

Release Detection Requirements and Methods for Underground Piping

(1) For underground piping that routinely contains a regulated substance, an owner and permittee of a petroleum UST system must provide release detection which meets the requirements of this rule.

(2) Pressurized piping. For underground piping that conveys regulated substances under pressure, an owner and permittee must insure that the piping is equipped with an automatic line leak detector that alerts an owner and permittee to the presence of a leak by restricting or shutting off the flow of regulated substances through underground piping or by triggering an audible or visual alarm. Interstitial monitoring sensor systems or stand alone "sump" sensors are not an acceptable alternative for a line leak detector. In addition,

(a) The line leak detector must be approved by a national organization (e.g., the National Work Group on Leak Detection);

(b) The line leak detector must be capable of detecting a leak of three gallons per hour at ten pounds per square inch line pressure within one hour; and

(c) An annual test of the operation of the line leak detector must be conducted in accordance with the manufacturer's requirements.

(3) In addition to the requirements of section (2) of this rule, an owner and permittee with pressurized piping must conduct an annual line tightness test that can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure. Interstitial monitoring sensors may replace the annual line tightness test if:

(a) The equipment is designed, constructed and installed to monitor all portions of the underground piping that routinely contains a regulated substance; and

(b) The requirements for interstitial monitoring (OAR 340-150-0465) are met.

(4) Suction piping. For underground piping that conveys a regulated substance under suction (i.e., piping that operates at less than atmospheric pressure), an owner and permittee must check the piping for the presence of air in the pipeline in accordance with the National Fire Protection Association standard NFPA, 329 (1999) "Recommended Practices for Handling Releases of Flammable and Combustible Liquids and Gases" Chapter 5, *Release Detection of Tanks and Piping*, subsection 5-2.3.2(b), if any of the following indicator conditions are observed by any person dispensing a regulated substance:

(a) If there are indications of air in the pipeline or other unusual operating conditions are observed (refer to NFPA 329 subsection 5-2.3.2(a) for specific indicators), the pipeline check valve should be inspected to determine if it is seated tightly. The check valve must be repaired, replaced or sealed off as appropriate depending on the results of the inspection; and

(b) The requirements of OAR 340-150-0350 through 340-150-0354 must be met for any repair, modification or replacement actions taken to correct a problem.

(5) In addition to the requirements of section (4) of this rule, an owner and permittee of suction piping must conduct a line tightness test at least once every three years that can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure.

(6) Release detection is not required for suction piping that is designed and constructed to meet the following standards:

(a) The below grade underground piping operates at less than atmospheric pressure;

(b) The below grade underground piping is sloped so that the contents of the pipe will drain back into the UST if the suction is released;

(c) Only one check valve is present in each suction line;

(d) The check valve is located directly below and as close as practical to the suction pump; and

(e) A method is provided that allows the department to readily determine compliance with this section of the rule.

(7) In lieu of conducting annual line tightness tests on either pressurized or suction piping, an owner and permittee may conduct monthly monitoring by one of the applicable release detection methods described in OAR 340-150-0450 through 340-150-0470, if the method is designed to detect a release from any portion of the underground piping that routinely contains a regulated substance.

(8) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records.

(9) An owner and permittee must report to the department any leak test results or other observations or results indicating the possibility of a release within 24 hours as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with 340-150-0510.

340-150-0420

Release Detection Requirements for Hazardous Substance UST Systems

(1) An owner and permittee of an UST system containing a hazardous substance other than petroleum must provide release detection that meets the requirements of this rule.

(2) Secondary containment systems. An owner and permittee may use the provisions of 40 CFR § 265.193, "Containment and Detection of Releases" to comply with this section of the rule. Secondary containment systems must be designed, constructed and installed to:

(a) Contain regulated substances released from the UST system until they are detected and removed; and

(b) Prevent the release of regulated substances to the environment at any time during the operational life of the UST system.

(3) Multiwalled USTs must be designed, constructed and installed to:

(a) Contain a release from any portion of the inner tank within the outer wall; and

(b) Detect the failure of the inner wall.

(4) External liners (including vaults) must be designed, constructed and installed to:

(a) Contain 100 percent of the capacity of the largest tank within its boundary;

(b) Prevent the interference of precipitation or groundwater intrusion with the ability to contain or detect a release of regulated substances; and

(c) Surround the tank completely (i.e., it is capable of preventing lateral as well as vertical migration of regulated substances).

(5) Underground piping must be equipped with secondary containment that satisfies the requirements of section (2) of this rule (e.g., trench liners, jacketing of double walled pipe). In addition, underground piping that conveys regulated substances under pressure must be equipped with an automatic line leak detector in accordance with OAR 340-150-0410(2).

(6) An owner and permittee must monitor the UST system for releases every 30 days and record the results for each month.

(7) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records.

(8) An owner and permittee must report to the department any release detection failure indicating the possibility of a release within 24 hours as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with 340-150-0510.

(9) An owner and permittee may use an alternative method of release detection if the proposed method is approved by the department in writing before installation of the UST system or addition of the release detection method. To obtain approval from the department, an owner and permittee must submit the following information for review:

(a) Technical, scientific data and reports that demonstrate that the proposed alternate method can detect a release of the stored hazardous substance as effectively as any of the methods allowed in OAR 340-150-0450 through 340-150-0470 can detect a release of petroleum; and

(b) Information on the effective corrective action technologies, health and environmental risks and chemical and physical properties of the stored substance and the geologic characteristics of the UST facility.

340-150-0430

Inventory Control Method of Release Detection

(1) An owner and permittee using inventory control as a release detection method must meet the requirements of this rule. Inventory control cannot be used as a release detection method for underground piping.

(2) Use of inventory control as a release detection method is allowed for a period of:

(a) Ten years after the installation of the UST system; or

(b) Ten years after the UST system achieved compliance with corrosion protection requirements; except

(c) In no case may inventory control be used as a *primary* release detection method after December 22, 2008; and

(d) After the period of use has expired as listed in subsections (a) through (c) of this section, an owner and permittee must use one of the release detection methods in OAR 340-150-0450 through 340-150-0470.

(3) Regulated substance (i.e., product) inventory control must be recorded daily and reconciled monthly to detect a release of at least 1.0 percent of flow-through plus 130 gallons on a monthly basis.

(4) Inventory volume measurements for regulated substance inputs (deliveries), withdrawals and the amount still remaining in the UST must be recorded each operating day.

(5) The equipment used to measure the level of regulated substance in the UST (e.g., stick or automatic tank gauge) must be capable of measuring the level of the regulated substance over the full range of the tank's height to the nearest one-eighth of an inch.

(6) Regulated substance inputs must be reconciled with delivery receipts by measurement of the tank inventory volume before and after each delivery.

(7) Regulated substance deliveries must be made through a drop tube that extends to within one foot of the tank bottom.

[Note: To meet Stage I air quality vapor control requirements, drop tubes must be within six inches of the tank bottom.]

(8) Regulated substance dispensing must be metered and recorded within the local standards for meter calibration or an accuracy of six cubic inches for every five gallons of the regulated substance withdrawn.

(9) The measurement of any water level in the bottom of the tank must be made to the nearest one-eighth of an inch at least once a month.

(10) Any monthly inventory reconciliation (positive or negative) that exceeds the comparison number of 1.0 percent of flow-through plus 130 gallons or greater leak rate in any single month is considered to be a release detection failure. An owner and permittee must:

(a) Report to the department a release detection failure that occurs for two consecutive months within 24 hours as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with 340-150-0510; and

(b) Immediately investigate all larger-than-normal or reoccurring variations in results, including widely fluctuating water levels in the UST and report such variations to the department as a suspected release if the variation cannot be accounted for, without waiting to obtain a second month of data.

(11) An owner and permittee must have USTs tightness tested (OAR 340-150-0445) at least once every five years when inventory control is used as the sole or primary release detection method.

(12) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records and the last two tightness test results.

(13) An owner and permittee may use the practices described in the American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets" (1993), where applicable, as guidance in meeting the requirements of this rule.

340-150-0435

Statistical Inventory Reconciliation Method of Release Detection

(1) An owner and permittee using statistical inventory reconciliation (SIR) as a release detection method must meet the requirements of this rule. SIR cannot be used as a release detection method for pressurized underground piping.

(2) The method must be capable of detecting a least a 0.2 gallon per hour leak rate from any portion of the UST that routinely contains a regulated substance with a probability of detection of at least 95 percent and a probability of false alarm of no more than 5 percent.

(3) The SIR method used must be an approved leak detection method that meets the requirements of section (2) of this rule as listed by a national organization (e.g., the National Work Group on Leak Detection).

(4) Daily inventory control regulated substance measurements and data gathering must be performed in accordance with OAR 340-150-0430(4) through (9).

(5) An UST system must be monitored for releases on a monthly basis when the SIR method is used. To meet the monthly monitoring requirements, an owner and permittee must, within 22 days after each calendar month or 30-day period, submit the daily inventory records to and receive the SIR results back from the SIR vendor they have hired to perform the statistical analysis. An owner and permittee must follow up with the SIR vendor if there are delays and make any changes necessary to their service agreement or contract to prevent late report submittals.

(6) The results of a SIR analysis that shows a 0.2 gallon per hour or greater leak rate in any single month is considered to be a release detection failure.

(7) An owner and permittee must report to the department any single release detection failure and any two inconclusive results (as reported by the SIR vendor) obtained within a consecutive two-month period within 24 hours as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with OAR 340-150-0510; additionally,

(a) An owner and permittee must investigate and attempt to remedy or repair the cause of inconclusive results; and

(b) SIR must be discontinued as the release detection method and immediately substituted with one of the release detection methods listed in OAR 340-150-0450 through 340-150-0470 if:

(A) An owner and permittee is unable to correct the cause of the inconclusive results after tank and piping tightness testing results or other investigation methods confirm that the UST system is not leaking; and

(B) More than four inconclusive results are recorded within a consecutive 12-month period.

(c) An owner and permittee must immediately investigate all larger-than-normal, unusual or reoccurring variations in results, including widely fluctuating water levels in the tank and report such variations as a suspected release if the variation cannot be accounted for, without waiting to obtain a second month of data.

(8) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records, including SIR vendor results and inventory control records.

340-150-0440

Manual Tank Gauging Release Detection Method

(1) An owner and permittee may use manual tank gauging as a release detection method for USTs that are less than 2,001 gallons in size.

(a) For USTs of 1,000 gallons or less in size, this method may be used as the sole method of release detection.

(b) For USTs of 1,001 to 2,000 gallons in size, this method may be used instead of manual inventory control (OAR 340-150-0430). This method is allowed for a period of:

(A) Ten years after the installation of the UST system; or

(B) Ten years after the UST system achieved compliance with corrosion protection requirements; except

(C) In no case may manual tank gauging be used as a *primary* release detection method after December 22, 2008.

(c) After the period of use has expired as listed in paragraph (1)(b)(C) of this section, an owner and permittee of an UST between 1,001 and 2,000 gallons in size must use one of the release detection methods in OAR 340-150-0450 through 340-150-0470.

(2) An owner and permittee must use the following procedures for the manual tank gauging release detection method:

(a) Tank liquid level measurements must be taken at the beginning and ending of a minimum 36-hour test period, during which time no liquid (i.e., regulated substance) may be added to or removed from the UST;

(b) Level measurements must be based on an average of two consecutive measuring stick or automatic tank gauge readings at both the beginning and ending of the period in which the UST is tested; and

(c) The equipment used to measure the level of regulated substance in the UST (e.g., stick or automatic tank gauge) must be capable of measuring the level of the regulated substance over the full range of the UST's height to the nearest one-eighth of an inch.

(3) An owner and permittee must monitor the UST system for releases at least weekly and record and reconcile the results of each week's readings for each month.

(4) In addition to any other requirements of this rule, an owner and permittee must conduct tightness testing (OAR 340-150-0445) of USTs of 1,001 to 2,000 gallons in size at least once every five years.

(5) An owner and permittee must report to the department any variation between beginning and ending measurements that exceeds either the weekly or monthly standards in subsections (a) through (c) of this section within 24 hours as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with 340-150-0510:

- (a) For USTs of 550 gallons or less in size:
 - (A) Weekly standard (one test) is ten gallons.
 - (B) Monthly standard (average of four tests) is five gallons.
- (b) For USTs of 551 to 1,000 gallons in size:
 - (A) Weekly standard (one test) is 13 gallons.
 - (B) Monthly standard (average of four tests) is seven gallons.
- (c) For USTs of 1,001 to 2,000 gallons in size:
 - (A) Weekly standard (one test) is 26 gallons.
 - (B) Monthly standard (average of four tests) is 13 gallons.
- (d) An owner and permittee must immediately investigate all larger-than-normal or reoccurring variations in results and report such variations to the department as a suspected release if the variation cannot be accounted for, without waiting to obtain a second week of data.
- (6) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records and the last two tightness test results.

340-150-0445

Tank Tightness Testing for Release Detection and Investigation

- (1) An owner and permittee using tank tightness testing in combination with a primary release detection method or as a method for investigating a suspected release must use a test method or procedure that:
 - (a) Is able to detect a 0.1 gallon per hour leak rate from any portion of the UST that routinely contains a regulated substance, while accounting for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation and the location of the water table;
 - (b) Meets a probability of detection of at least 95 percent and a probability of false results (or false alarm, depending on method used) of no more than 5 percent;
 - (c) Is an approved leak detection method or equipment as listed by a national organization (e.g., the National Work Group on Leak Detection); and
 - (d) Is performed by a service provider or supervisor licensed by the department, except as provided by OAR 340-150-0156.
- (2) Some automatic tank gauge equipment may meet the leak rate and probability requirements and may be used in place of a separate tank tightness test. To qualify as a tank tightness test, the automatic tank gauge must meet the requirements of subsections (1)(a), (b) and (c) of this rule.
- (3) If an UST system fails a tank tightness test (after the tank tester has ensured that all test protocols were properly performed), an owner and permittee must report the failure to the department within 24 hours of receipt of the results as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with 340-150-0510.

340-150-0450

Automatic Tank Gauging Release Detection Method

- (1) An owner and permittee using equipment for automatic tank gauging (ATG) that tests for the loss of a regulated substance and conducts inventory control as a release detection method must use equipment that meets the requirements of this section. The ATG system must:
 - (a) Be able to detect a 0.2 gallon per hour leak rate with a probability of detection of at least 95 percent and a probability of false alarm of no more than 5 percent for all portions of the UST that routinely contain a regulated substance; and
 - (b) Be an approved leak detection method or equipment as listed by a national organization (e.g., the National Work Group on Leak Detection).
- (2) For USTs, an owner and permittee must monitor and test for releases at least once every 30 days and record results for each month.
- (3) For underground piping, an owner and permittee must monitor and test for releases if the ATG system is designed to detect a release from any portion of the underground piping that routinely contains a regulated substance and record results for each month as follows:
 - (a) Daily for pressurized piping.
 - (b) Once every 30 days for suction piping.
- (4) An owner and permittee must:
 - (a) Report to the department any leak test results indicating the possibility of a release (i.e., test failure) within 24 hours as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with OAR 340-150-0510; and
 - (b) Immediately investigate all larger-than-normal or reoccurring variations in results, including widely fluctuating water levels in the tank and report such variations as a suspected release if the variation cannot be accounted for, without waiting to obtain a second month of data.

(5) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records.

(6) ATG systems installed before December 22, 1990, are exempt from the leak rate quantities, probability limits and third party evaluation requirements of this rule, except:

(a) The ATG system must be able to detect a 0.2 gallon per hour leak rate from any portion of the UST that routinely contains a regulated substance; and

(b) An owner and permittee can only use the ATG system to obtain daily regulated substance volumes for the inventory control release detection method (OAR 340-150-0430) if the ATG does not meet the requirements of section (1) of this rule.

340-150-0455

Vapor Monitoring Release Detection Method

(1) An owner and permittee may use testing or monitoring for vapors within the soil gas of the excavation zone as a release detection method for an UST or underground piping if the method is approved by the department in writing before installing or operating any portion of the vapor monitoring system, including wells.

(2) An owner and permittee must submit to the department, at least 30 days before installing any portion of the vapor monitoring system, a written design plan (including all technical data and design information) prepared and signed by a registered professional engineer or a registered geologist specially qualified by education and experience to design release detection systems. The design plan must meet the following minimum requirements:

(a) The materials used as backfill must be sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation area;

(b) The stored regulated substance or a tracer compound placed in the UST system, must be sufficiently volatile (e.g., gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank;

(c) The measurement of vapors by the monitoring device must not be rendered inoperative by groundwater, rainfall or soil moisture or other known interferences so that a release could go undetected for more than 30 days;

(d) The level of background contamination in the excavation zone must not interfere with the method used to detect releases from the tank; and

(e) The vapor monitors must be designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the UST system, a component or components of that substance or a tracer compound placed in the UST system.

(3) Before installation of monitoring wells, an owner and permittee must have the site assessed to demonstrate compliance with the requirements of this rule and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the UST or underground piping that routinely contains a regulated substance.

(4) The department will approve the installation if, after reviewing the design plan, it determines that the vapor monitoring system proposed is capable of detecting a release from any portion of the UST or underground piping that routinely contains a regulated substance.

(5) An owner and permittee must mark and secure monitoring wells at all times to prevent unauthorized access and tampering.

(6) Release detection observation, documentation and reporting requirements. An owner and permittee must:

(a) Operate and maintain the continuous monitoring device or manual method so the equipment will detect the presence of vapors as noted in subsection (2)(e) of this rule;

(b) Perform an alarm test at least once each month;

(c) Check the excavation zone for releases and record the observation results for each month. At a minimum, records must include documentation that the system is properly operated and maintained and include results of alarm tests made, according to the following schedule:

(A) On a daily basis for USTs and pressurized piping.

(B) Once every 30 days for suction piping.

(d) Report to the department any observations or alarms indicating the possibility of a release within 24 hours as a suspected release (OAR 340-150-500) and immediately begin investigation in accordance with OAR 340-150-0510.

(7) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records and vapor well installation approval documents must be available for department review upon request.

340-150-0460

Groundwater Monitoring Release Detection Method

(1) An owner and permittee may use testing or monitoring for liquid regulated substances on or in the groundwater as a release detection method for an UST or underground piping if the method is designed to detect a release from any portion of

the UST or underground piping that routinely contains a regulated substance.

(2) An owner and permittee must submit to the department, at least 30 days before installing or operating any portion of the groundwater monitoring system, a written design plan (including all technical data and design information) prepared and signed by a registered professional engineer or a registered geologist specially qualified by education and experience to design release detection systems. The design plan must meet the following minimum requirements:

- (a) The regulated substance stored must be immiscible in water and have a specific gravity of less than one;
- (b) Sufficient data must be included, and periodically checked, to demonstrate that groundwater will never be more than 20 feet from the ground surface and the hydraulic conductivity of the soil between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (e.g., the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials);

(c) The slotted portion of the monitoring well casing must be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low groundwater conditions;

- (d) Monitoring wells must be sealed from the ground surface to the top of the filter pack; and
- (e) Monitoring wells or devices must intercept the excavation zone or are as close to it as is technically feasible.

(3) Before installation of monitoring wells, an owner and permittee must have the site assessed to demonstrate compliance with the requirements of this rule and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the UST or piping that routinely contains a regulated substance.

(4) The department will approve the installation if, after reviewing the design plan, it determines that the groundwater monitoring system proposed is capable of detecting a release from any portion of the UST or underground piping that routinely contains a regulated substance.

(5) An owner and permittee must mark and secure monitoring wells at all times to prevent unauthorized access and tampering.

(6) Release detection observation, documentation and reporting requirements. An owner and permittee must:

(a) Operate and maintain the continuous monitoring device or manual method so the equipment will detect the presence of at least one-eighth of an inch of free product on top of the groundwater in the monitoring wells;

(b) Perform an alarm test at least once each month;

(c) Check the excavation zone for releases and record the observation results for each month. At a minimum, records must include documentation that the system is properly operated and maintained and include results of alarm tests made, according to the following schedule:

(A) On a daily basis for USTs and pressurized piping.

(B) Once every 30 days for suction piping.

(d) Report to the department any observations or alarms indicating the possibility of a release within 24 hours as a suspected release (OAR 340-150-500) and immediately begin investigation in accordance with OAR 340-150-0510.

(7) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records and groundwater well installation approval documents must be available for department review upon request.

340-150-0465

Interstitial Monitoring Release Detection Method

(1) An owner and permittee may use an interstitial monitoring system as a release detection method if:

(a) The system is designed, constructed and installed in accordance with a national code of practice or industry standard and the interstitial monitoring system is an approved leak detection system (method and equipment) as listed by a national organization (e.g., the National Work Group on Leak Detection); and

(b) The system is able to detect a leak from any portion of an UST or underground piping that routinely contains a regulated substance.

(2) An owner and permittee must meet the following requirements for the specific type of UST system or piping:

(a) Multiwalled UST systems. The sampling or testing method must be able to detect a release through the inner wall in any portion of the UST. The provisions outlined in the Steel Tank Institute "Standard for Dual Wall Underground Storage Tanks" (2001) may be used as guidance for aspects of the design and construction of underground metal double walled tanks.

(b) UST systems with a secondary barrier within the excavation zone. The sampling or testing method used must be able to detect a release between the UST system and the secondary barrier.

(A) The secondary barrier around or beneath the UST system must consist of artificially constructed material that is sufficiently thick and impermeable (at least 10^{-6} cm/sec for the regulated substance stored) to direct a release to the monitoring point and permit its detection;

(B) The secondary barrier must be compatible with the regulated substance stored so that a release from the UST system will not cause a deterioration of the barrier or allow a release to pass through the barrier;

(C) For USTs with corrosion protection, the secondary barrier must be installed so that it does not interfere with the

proper operation of the corrosion protection system;

(D) Groundwater, soil moisture or rainfall cannot render the testing or sampling method used inoperative so that a release could go undetected for more than 30 days or one day if used for pressurized underground piping;

(E) Before installation, an owner and permittee must have the site assessed to demonstrate that the secondary barrier is always above the seasonal high groundwater level and not in a 25-year flood plain, unless the barrier and monitoring system are designed for use under such conditions; and

(F) An owner and permittee must mark and secure monitoring wells at all times to prevent unauthorized access and tampering.

(c) USTs with an internally fitted liner. An automated device must be able to detect a release between the inner wall of the UST and the liner and the liner must be compatible with the regulated substance stored.

(d) Double walled pressurized piping. Interstitial monitoring sensors must be installed in any transition sump which houses a noncontinuous junction of the interstitial space (e.g., any and all points along the piping run where the interstitial space is no longer continuous).

(3) An owner and permittee must monitor the UST and underground suction piping for a release at least every 30 days and record the results for each month.

(4) An owner and permittee must monitor pressurized underground piping for a release daily and record the results for each month.

(5) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records. Records must include, at a minimum, the date the system was checked, observations made and the name or initials of the person conducting the monitoring. In addition, records for electronic systems must include: power status (on or off), alarm indication status (yes or no) and sensor malfunction noted (yes or no).

(6) An owner and permittee must report to the department any leak test observations, alarms or results indicating the possibility of a release to the interstitial area within 24 hours as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with 340-150-0510.

340-150-0470

Other Methods of Release Detection

(1) An owner and permittee may use a release detection method for an UST or underground piping not otherwise specified in OAR 340-150-0410 through 340-150-0465 if the device is able to detect a 0.2 gallon per hour leak rate with a probability of detection of at least 95 percent and a probability of false alarm of no more than 5 percent for all portions of the UST or underground piping that routinely contains a regulated substance and is an approved leak detection method or equipment as listed by a national organization (e.g., the National Work Group on Leak Detection).

(2) An owner and permittee must monitor the UST and underground suction piping for a release at least every 30 days and record the results for each month.

(3) An owner and permittee must monitor pressurized underground piping for a release daily and record the results for each month.

(4) An owner and permittee must:

(a) Report to the department any release detection test results indicating the possibility of a release (i.e., test failure or alarm) within 24 hours as a suspected release (OAR 340-150-0500) and immediately begin investigation in accordance with OAR 340-150-0510; and

(b) Immediately investigate all larger-than-normal or reoccurring variations in results and report such variations as a suspected release if the variation cannot be accounted for, without waiting to obtain a second confirmation of data.

(5) An owner and permittee must retain at a minimum the most current 12 consecutive months of release detection records.

340-150-0500

Reporting Suspected Releases

(1) An owner and permittee of an UST system must notify the department within 24 hours and follow the procedures in OAR 340-150-0510 for any of the following conditions:

(a) The discovery by any means of a regulated substance at the UST facility or in the surrounding off site area such as, but not limited to, the presence of free product or vapors in soils, basements, sewer or utility lines or nearby surface water or release into a secondary containment area. Additionally, an owner and permittee must identify and mitigate any fire, explosion or vapor hazards at the UST facility in accordance with OAR 340-122-0220(3);

(b) Unusual operating conditions (such as, but not limited to, the erratic behavior of dispensing equipment, the sudden loss of product from the UST system, differences or widely fluctuating water levels or an unexplained presence of water in the tank) observed by the owner, permittee, employee or other knowledgeable personnel, unless system equipment is immediately tested and found to be defective, but not leaking, and is immediately repaired or replaced; or

(c) Monitoring results or alarms from any release detection method that indicates a release may have occurred, unless the monitoring device is found to be defective and is immediately repaired, recalibrated or replaced and subsequent monitoring events as required by the specific release detection method do not confirm the initial result. The specific release detection requirements are found in OAR 340-150-0420 through 340-150-0470.

(2) Upon receipt of a notice of a suspected release, a confirmation number will be provided to the owner and permittee that serves as proof that timely notice was received. This confirmation number should be referenced by an owner and permittee when reporting the results of actions taken to comply with OAR 340-150-0510.

340-150-0510

Suspected Release Investigation and Confirmation Steps

(1) Following the discovery of a suspected release, an owner and permittee must immediately initiate investigation and confirmation of a suspected release of a regulated substance as required by this rule. This investigation must be completed within seven days or as otherwise approved or directed by the department.

(2) Upon expiration of the 7-day period or other period approved by the department, an owner and permittee must notify the department of the investigation results by submitting to the department:

(a) A written description of the system test conducted confirming that a release did not occur, including any test results; or

(b) A written plan of action to complete the suspected release investigation system test or site assessment. Any plan of action must include a firm schedule for completion.

(3) System test. An owner and permittee must conduct tightness testing to determine whether a leak exists in any portion of the UST that routinely contains a regulated substance (OAR 340-150-0445) or the underground piping (340-150-0410) or both. An owner and permittee must investigate the cause of a release into any secondary containment unit including, but not limited to, underground piping, turbine sumps, transition sumps and dispenser pans by conducting tests in accordance with manufacturer requirements or as directed by the department. All regulated substances (product) or product and water mixture must be removed from the containment system and properly disposed in accordance with all state, federal and local requirements.

(a) If the suspected release was not reported due to any of the conditions described in OAR 340-150-0500(1)(a) and the system test results do not indicate that a release has occurred, further investigation is not required, unless otherwise directed by the department.

(b) If the suspected release was reported due to any of the conditions described in OAR 340-150-0500(1)(a) or the system test results indicate that a release exists, an owner and permittee must assess and repair, replace or modify the UST system and begin corrective action in accordance with sections (4) and (5) of this rule.

(4) Site assessment. If the test results for the UST, piping or secondary containment units do not indicate that a release exists, but the suspected release was reported due to any of the conditions described in OAR 340-150-0500(1)(a) or if directed by the department, an owner and permittee must conduct a site assessment for contaminated soil or groundwater. An owner and permittee must measure for the presence of a release where contamination is most likely to be present based on all information available. In selecting sample types, sample locations and measurement methods, an owner and permittee must consider the nature of the stored substance, the type of initial alarm or cause for suspicion, the type of backfill, the depth to groundwater and other factors appropriate for identifying the presence and source of the release. The requirements for sample collection, analytical tests and methods contained in OAR 340-122-0205 through 340-122-0360 must be used as appropriate. The department may require that a sampling plan be submitted for approval before conducting any sampling on a case by case basis. In addition:

(a) If the site assessment results do not indicate that a release has occurred, further investigation is not required unless specifically directed by the department.

(b) If the site assessment results indicate that a release has occurred, an owner and permittee must begin corrective action in accordance with section (5) of this rule.

(5) If the suspected release investigation confirms that a release has occurred, an owner and permittee must report the confirmed release to the department within 24 hours of confirmation and comply with the following release reporting, site investigation and corrective action requirements:

(a) For petroleum USTs; OAR 340-122-0205 through 340-122-0360.

(b) For USTs containing nonpetroleum regulated substances; OAR 340-122-0010 through 340-122-0115, except that releases must be reported in accordance with the requirements of OAR chapter 340, division 142.

(6) The department may require that an owner and permittee perform additional actions not specifically listed in this rule on a case by case basis to address actual or potential threat to human health or the environment.

340-150-0520

Investigation Due to Off Site Impacts

When required by the department, an owner and permittee of an UST system must follow the procedures in OAR 340-150-0510 to determine if their UST system is the source of off site impacts. These impacts include, but are not limited to, the presence of a regulated substance (such as the presence of free product or vapors in soils, basements, sewer and utility lines and nearby surface and drinking waters) that has been observed by the department or brought to its attention by another person.

340-150-0540

Applicability to Previously Closed UST Systems

When directed by the department, an owner of an UST system permanently closed or abandoned (e.g., left unused without being substantially emptied, decommissioned or permanently altered structurally to prevent reuse) before December 22, 1988, or an owner and permittee for any UST facility for which inadequate decommissioning records are available for review by the department, must assess the excavation zone and close the UST system in accordance with this division if a release from the UST poses, in the judgment of the department, a current or potential threat to human health or the environment.

340-150-0550

Definitions for OAR 340-150-0555 and 340-150-0560

As used in OAR 340-150-0555 and 340-150-0560, the following terms are defined as follows:

- (1) "Existing UST system" means an UST system used to contain an accumulation of regulated substances where installation commenced on or before December 22, 1988.
- (2) "New UST system" means an UST system used to contain a regulated substance and for which installation commenced after December 22, 1988.
- (3) "Upgrade" means the addition to or retrofit of an UST system to meet technical requirements for cathodic protection, lining, release detection or spill and overfill protection before December 22, 1998.

340-150-0555

Compliance Dates for USTs and Piping

- (1) An owner and permittee must comply with all release detection requirements for a new or existing UST system or permanently close the UST system by the following schedule:
 - (a) For UST systems installed before 1965 and for UST systems where the installation date is unknown:
 - (A) December 22, 1989, for tanks and suction piping.
 - (B) December 22, 1990, for pressurized piping.
 - (b) For UST systems installed between 1965 and 1969 - December 22, 1990, for tanks, suction piping and pressurized piping.
 - (c) For UST systems installed between 1970 and 1974:
 - (A) December 22, 1990, for pressurized piping.
 - (B) December 22, 1991, for tanks and suction piping.
 - (d) For UST systems installed between 1975 and 1979:
 - (A) December 22, 1990, for pressurized piping.
 - (B) December 22, 1992, for tanks and suction piping.
 - (e) For UST systems installed between 1980 and December 22, 1988:
 - (A) December 22, 1990, for pressurized piping.
 - (B) December 22, 1993, for tanks and suction piping.
 - (f) For tanks, suction piping and pressurized piping, release detection requirements must be met upon date of installation for all new UST systems installed after December 22, 1988.
- (2) An owner and permittee of a new UST system installed after December 22, 1988, must comply with the corrosion protection performance standards for tanks and piping (OAR 340-150-0320 and 340-150-0325) by no later than December 22, 1998.
- (3) An owner and permittee of an existing UST system installed on or before December 22, 1988, must comply with the requirements for upgrading USTs and piping (OAR 340-150-0560) by no later than December 22, 1998.
- (4) In lieu of complying with section (2) or (3) of this rule, an owner and permittee must decommission the UST system in compliance with the requirements of OAR 340-150-0166 through 340-150-0168 by no later than December 22, 1998.
- (5) An owner and permittee of a hazardous substance UST system (e.g., an UST containing any nonpetroleum regulated substance) installed on or before December 22, 1988, must comply with the release detection requirements of OAR 340-150-0400 and 340-150-0410 until December 22, 1998. After December 22, 1998, an owner and permittee of all hazardous

substance UST systems must comply with the requirements of OAR 340-150-0420.

(6) An owner and permittee of a new or existing UST system that does not meet the performance standards in OAR 340-150-0300 or 340-150-0560 may use monthly inventory control and annual tank tightness testing as a release detection method until December 22, 1998. After that date, an owner and permittee must upgrade or permanently close the UST system.

340-150-0560

Upgrading Requirements for Existing UST Systems

This rule describes the technical requirements for UST systems that an owner and permittee was required to meet by December 22, 1998, in accordance with OAR 340-150-0555(3). The equivalent federal rule citation has been included for reference.

(1) Tank upgrading requirements. An owner and permittee of a steel UST must upgrade the UST system to meet one of the following requirements in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory (40 CFR § 280.21(b)):

(a) Interior lining. An UST may be upgraded by internal lining (40 CFR § 280.21(b)(1)) if:

(A) The lining is installed in accordance with the requirements of 40 CFR § 280.33 (OAR 340-150-0352); and

(B) Within ten years after lining and every five years thereafter, the lined UST is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications (OAR 340-150-0360).

(b) Cathodic protection (40 CFR § 280.21(b)(2)). An UST may be upgraded by the addition of cathodic protection if the cathodic protection system meets the requirements of 40 CFR § 280.20(a)(2)(ii), (iii) and (iv) (OAR 340-150-0320(3)) and the integrity of the UST is ensured using one of the following methods:

(A) The UST is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes before installing the cathodic protection system;

(B) The UST has been installed for less than ten years and is monitored monthly (or daily as required by the specific method) for releases in accordance with 40 CFR § 280.43(d) through (h) (OAR 340-150-0450 through 340-150-0470);

(C) The UST has been installed for less than ten years and is assessed for corrosion holes by conducting two tightness tests that meet the requirements of 40 CFR § 280.43(c) (OAR 340-150-0445). The first tightness test must be conducted before installing the cathodic protection system. The second tightness test must be conducted between three and six months following the first operation of the cathodic protection system; or

(D) The UST is assessed for corrosion holes by a method that is determined by the department to prevent releases in a manner that is no less protective of human health and the environment than paragraphs (A) through (C) of this subsection.

(c) Internal lining combined with cathodic protection (40 CFR § 280.21(b)(3)). An UST may be upgraded by both internal lining and cathodic protection if:

(A) The lining is installed in accordance with the requirements 40 CFR § 280.33 (OAR 340-150-0352); and

(B) The cathodic protection system meets the requirements of 40 CFR § 280.20(a)(2)(ii), (iii) and (iv) (OAR 340-150-0320(3)).

(2) An owner and permittee may use the following codes and standards to comply with section (1) of this rule:

(a) American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks";

(b) National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection";

(c) National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried or Submerged Liquid Storage Systems"; and

(d) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems."

(3) Piping upgrading requirements (40 CFR § 280.21(c)). An owner and permittee of steel underground piping that routinely contains a regulated substance must cathodically protect the piping in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and meet the requirements of 40 CFR § 280.20(b)(2)(ii) (iii) and (iv) (OAR 340-150-0320(2) through (4)). An owner and permittee may use the following codes and standards to comply with this requirement (40 CFR § 280.20(b)):

(a) Underwriters Laboratories Subject 971, "UL Listed Non-Metal Pipe";

(b) Underwriters Laboratories Standard 567, "Pipe Connectors for Flammable and Combustible and LP Gas";

(c) Underwriters Laboratories of Canada Guide ULC-107, "Glass Fiber Reinforced Plastic Pipe and Fittings for Flammable Liquids"; and

(d) Underwriters Laboratories of Canada Standard CAN 4-S633-M81, "Flexible Underground Hose Connectors."

(4) Spill and overfill prevention equipment (40 CFR § 280.21(d)). To prevent spilling and overfilling associated with transfer of a regulated substance to the UST system, an owner and permittee of an existing UST system must comply with new UST system spill and overfill prevention equipment requirements specified in 40 CFR § 280.20(c) (OAR 340-150-0310).

(5) Reporting requirements (40 CFR § 280.21(e) as previously modified by OAR 340-150-0003(41)). At least 30 days before beginning the upgrading of an existing UST system under sections (1) and (2) of this rule, an owner and permittee must notify the department, on a form provided by the department, of their intent to upgrade an existing UST system. Unless the department agrees to waive the requirement, at least three working days before beginning the upgrade, an owner, permittee or licensed service provider performing the work must notify the department of the confirmed date and time the upgrade will begin to allow observation by the department. An owner, permittee or licensed service provider must submit a completed installation checklist to the department within 30 days after completion of the upgrade.

340-150-0600

Delegation of Program Administration

(1) Any agency of the state or a unit of local government that seeks the authority to administer all or part of the UST program covered by OAR chapter 340, divisions 150 and 151 must submit to the department a written application that describes the portions of the UST program it proposes to administer. The application must contain the following:

- (a) A description in narrative form of the scope, structure, coverage and procedures of the proposed program; and
- (b) A description, including organization charts, of the organization and structure of applicant, including:
 - (A) The number of employees, occupation and general duties of each employee who will carry out the activities of the program;
 - (B) An itemized estimate of the cost of establishing and administering the program, including the cost of personnel listed in paragraph (A) of this subsection, administrative and technical support;
 - (C) An itemization of the source and amount of funding available to meet the costs listed in paragraph (B) of this subsection, including any restrictions or limitations upon this funding;
 - (D) A description of applicable procedures, including permit procedures;
 - (E) Copies of the permit form, application form and reporting form that will be used in the program;
 - (F) A complete description of the methods to be used to assure compliance and for enforcement of the program;
 - (G) A description of the procedures to be used to coordinate information with the department, including the frequency of reporting and report content; and
 - (H) A description of the procedures the applicant will use to comply with trade secret laws under ORS 192.500 and 468.910.

(2) Within 60 days after receiving the application, the department will review the application for completeness and request any additional information needed. The department will notify the applicant in writing when the application is complete.

(3) Within 120 days after the application is complete, the department will:

- (a) Approve the proposal by submitting a signed agreement or contract to the applicant that outlines the terms and conditions under which the department agrees to delegate all or a portion of the UST program described in section (1) of this rule; or
- (b) Deny the application if the department finds the program described by the applicant is not equivalent to the department's UST program.

(4) The agreement or contract may be terminated by either party by providing 30 days prior notice in writing.

340-150-0620

Approval of More Stringent Performance Standards

(1) Any unit of local government may petition the department for more stringent UST performance standards for UST systems in the vicinity of an underground water source. Administrative rules for more stringent performance standards may be proposed for adoption by the commission where the department finds that it is necessary to protect the underground water resource through more stringent UST performance standards.

(2) The petition must be made to the department in writing and must include the following information:

- (a) A description of the underground water resource including, but not limited to:
 - (A) The geographical limits of the area where more stringent UST performance standards are required;
 - (B) The geographical limits of the groundwater recharge zone;
 - (C) The geographical limits of the underground water resource;
 - (D) The geology within both the recharge zone and the underground water resource;
 - (E) The location, size and present use of wells within the limits of the underground water resource; and
 - (F) The estimated capacity of the underground water resource.
- (b) A description of the existing threats to the groundwater resource including, but not limited to:
 - (A) Location, type and number of USTs;
 - (B) Agricultural effluent and rainwater runoff;
 - (C) Industrial effluent and rainwater runoff; and

(D) Rainwater runoff from roads and parking lots.

(c) A description of the UST performance standards required, including UST technical standards, operating standards and administrative procedures; and

(d) A description of the emergency conditions, if the petitioner requests adoption of emergency rules.

(3) Within 60 days after receiving the petition, the department will review the petition for completeness and request any additional information needed. The department will notify the petitioner in writing when the petition is complete.

(4) Within 120 days after the petition is complete, the department will recommend to the commission that:

(a) The department initiate rulemaking to implement the performance standards requested; or

(b) The petition be denied if the department finds that more stringent UST performance standards are not necessary to protect the underground water resource.

APPENDIX A

OAR 340-150-0300

Installation of USTs and Piping

The following codes and standards may be used to comply with this rule:

(1) American Petroleum Institute Publication 1615 (1996), "Installation of Underground Petroleum Storage System";

(2) Petroleum Equipment Institute Publication RP100-2000 (2000), "Recommended Practices for Installation of Underground Liquid Storage Systems";

(3) National Fire Protection Association Standard 30 (2000), "Flammable and Combustible Liquids Code"; and

(4) American Petroleum Institute Publication 2200 (1994), "Repairing Crude Oil, Liquefied Petroleum Gas and Product Pipelines".

APPENDIX B

OAR 340-150-0300(3)

Installation of USTs and Piping

The following codes may be used for USTs or underground piping storing alcohol blends to comply with this section of the rule:

(1) American Petroleum Institute Publication 1626 (1985), "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations"; and

(2) American Petroleum Institute Publication 1627 (1986), "Storing and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations".

APPENDIX C

340-150-0310

Spill and Overfill Prevention Equipment and Requirements

The following codes and standards may be used to comply with this rule:

(1) Transfer procedures described in National Fire Protection Association Publication 385 (1990);

(2) Further guidance on spill and overfill prevention appears in:

(a) American Petroleum Institute Publication 1621 (1993), "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," and

(b) National Fire Protection Association Standard 30 (2000), "Flammable and Combustible Liquids Code".

APPENDIX D1-USTs

340-150-0320(2)

Corrosion Protection Performance Standards for USTs and Piping

The following standard may be used for USTs constructed of fiberglass-reinforced plastic to comply with this section of the rule:

Underwriters Laboratories Standard 1316 (1994), "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products".

APPENDIX D2-Piping

340-150-0320(2)

Corrosion Protection Performance Standards for USTs and Piping

The following codes and standards may be used for underground piping constructed of fiberglass-reinforced plastic to comply with this section of the rule:

(1) Underwriters Laboratories Subject 971 (1995), "UL Listed Non-Metal Pipe";

- (2) Underwriters Laboratories Standard 567 (1996), "Pipe Connectors for Flammable and Combustible and LP Gas"; and
- (3) American Petroleum Institute Standard 2610 (1994), "Design, Construction, Operation, Maintenance and Inspection of Terminal & Tank Facilities".

APPENDIX E1-USTs

OAR 340-150-0320(3)

Corrosion Protection Performance Standards for USTs and Piping

The following codes and standards may be used for USTs constructed of steel or other metal to comply with this section of the rule:

- (1) Steel Tank Institute STI-P3-00 (2000), "Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks";
- (2) Underwriters Laboratories Standard 1746 (1993), "Corrosion Protection Systems for Underground Storage Tanks"; and
- (3) National Association of Corrosion Engineers Standard RP 0285-2002, Standard Recommended Practice: "Control of External Corrosion on Metallic Buried, Partially Buried or Submerged Liquid Storage Systems," and Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids".

APPENDIX E2-Piping

OAR 340-150-0320(3)

Corrosion Protection Performance Standards for USTs and Piping

The following codes and standards may be used for underground piping constructed of steel or other metal to comply with this section of the rule:

- (1) National Fire Protection Association Standard 30 (2000), "Flammable and Combustible Liquids Code";
- (2) American Petroleum Institute Publication 1615 (1996), "Installation of Underground Petroleum Storage Systems";
- (3) American Petroleum Institute Publication 1632 (1996), "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems";
- (4) Steel Tank Institute -R922-00 (2000), "Specification for Permatank";
- (5) Steel Tank Institute -F961-00 (2000), "ACT-100-U Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks";
- (6) National Association of Corrosion Engineers RP-0169-2002 (01-JUL-02), Standard Recommended Practice: "Control of External Corrosion on Underground or Submerged Metallic Piping Systems";
- (7) National Association of Corrosion Engineers Test Method TM 0101-2001 (2001), "Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems";
- (8) Steel Tank Institute -R892-91 (1991), "Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems";
- (9) Steel Tank Institute -R972-98 (1998), "Recommended Practice for the Installation of Supplemental Anodes for STI-P3 USTs"; and
- (10) National Association of Corrosion Engineers Test Method TM 0497-2002 (2002), "Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems".

APPENDIX F

OAR 340-150-0320(4)

Corrosion Protection Performance Standards for USTs and Piping

The following codes may be used for USTs constructed of steel-fiberglass reinforced plastic composite to comply with this section of the rule:

- (1) Underwriters Laboratories Standard 1746 (1993), "Corrosion Protection Systems for Underground Storage Tanks";
- (2) Steel Tank Institute -F894-00 (2000), "ACT-100 Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks"; and
- (3) Steel Tank Institute -F961-00 (2000), "ACT-100U Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks".

APPENDIX G

340-150-0325

Operation and Maintenance of Corrosion Protection

The following standard may be used to comply with this rule:

The National Association of Corrosion Engineers Standard RP-0285-2002 (2002), "Standard Recommended Practice: Corrosion Control of Underground Storage Tank Systems by Cathodic Protection".

APPENDIX H

340-150-0350(3) UST System Repairs

340-150-0352 UST System Modifications and Additions

The following codes and standards may be used to comply with these rules:

- (1) National Fire Protection Association Standard 326 (1999), "Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning or Repair";
- (2) American Petroleum Institute Publication 1631 (2001), "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks";
- (3) National Association of Corrosion Engineers Standard RP-0285-2002, "Control of External Corrosion on Metallic Buried, Partially Buried or Submerged Liquid Storage Systems";
- (4) American Petroleum Institute Publication 1632 (1996), "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems";
- (5) Ken Wilcox Associates (1999), "Recommended Practice for Inspecting Buried Lined Steel Tanks Using a Video Camera";
- (6) National Association of Corrosion Engineers Standard RP-0178-95, "Recommended Practice: Design, Fabrication and Surface Finish of Metal Tanks and Vessels to be Lined for Chemical Immersion Service";
- (7) National Association of Corrosion Engineers Standard RP-0184-91 (1991), "Recommended Practice: Repair of Lining systems";
- (8) National Association of Corrosion Engineers Standard RP-0288-94 (1994), "Standard Recommended Practice: Inspection of Linings on Steel and Concrete";
- (9) Fiberglass Petroleum Tank & Pipe Institute Recommended Practice T-95-02 (1995), "Remanufacturing of Fiberglass Reinforced Underground Storage Tanks";
- (10) American Society of Testing and Materials G 158-98 (1998), "Standard Guide for Three Methods of Assessing Buried Steel Tanks"; and
- (11) American Society of Testing and Materials E 1990-98 (1998), "Standard Guide for Performing Evaluations of Underground Storage Tank Systems for Operational Compliance with 40 CFR, Part 280 Regulations".

APPENDIX I

OAR 340-150-0400

General Release Detection Requirements for All UST Systems

The following code may be used to comply with this rule:

American Society of Testing and Materials E 1526-93 (1993), "Standard Practice for Evaluating the Performance of Release Detection Systems for Underground Storage Tank Systems".

APPENDIX J

General Guidance Documents for UST Owners and Permittees

The following codes and standards may be useful for UST owners and permittees:

- (1) American Petroleum Institute Recommended Practice 2003 (1998), "Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents";
- (2) American Petroleum Institute Publication 2005 (1996), "Service Station Safety";
- (3) National Association of Corrosion Engineers Standard RP 0177-95 (1995) Recommended Practice: "Mitigation of Alternating Current and Lightning Effects on Metallic Structures and Corrosion Systems";
- (4) National Fire Protection Association 30A (1996), "Automotive and Marine Service Station Code";
- (5) National Fire Protection Association 385 (1990), "Standard for Tank Vehicles for Flammable and Combustible Liquids"; and
- (6) Underwriters Laboratories 58 (1996), Standard for Safety: "Steel Underground Tanks for Flammable and Combustible Liquids".

APPENDIX K

340-150-0180

Site Assessment Requirements for Permanent Closure or Change-In-Service

Written site assessment plans must be submitted to the department for review and approval before initiating:

- Permanent closure in-place;
- Change-in-service from regulated to nonregulated status; or
- Decommissioning an UST that contains a hazardous substance other than petroleum (by removal, closure in-place or change-in-service).

The site assessment plan may be prepared by completing a form provided by the department or the plan may be a written report that covers all elements of this Appendix. The requirements of OAR 340-150-0180(3) and (4) must be met. This Appendix includes the required information.

UST facility and permittee information:

Name and address of the UST facility, UST Facility ID number issued by DEQ and name, address and contact number for the permittee. The permittee must sign and date the completed report as true and correct.

Service provider and supervisor information:

Name, address and contact number for the service provider performing the work (including license number and expiration date) and supervisor assigned to the project (including license number and expiration date). The supervisor must sign and date the completed report as true and correct.

UST information:

For each UST: tank material or type, date installed, size, and contents. Include any information about tank history that could be significant (e.g., previous suspected or confirmed release reported, repairs, testing failures, etc.).

Type of decommissioning:

State which type of decommissioning will be performed: permanent closure in-place or change-in-service from regulated to nonregulated status for petroleum USTs or decommissioning an UST that contains a hazardous substance other than petroleum by removal, closure in-place or change-in-service.

Site diagram:

A site diagram (*drawn approximately to scale*) that notes the location of all USTs and underground piping, buildings and nearby properties must be attached to the site assessment plan. Note if there are any surface water bodies within ¼ mile of the UST facility or if any potential conduits exist that could spread contamination (e.g., water or sewer lines). Important: Identify the proposed location of all samples to be collected on the site diagram.

Site conditions:

The site assessment plan must address the possibility of encountering groundwater. If questionable, verify the depth to groundwater *and be prepared with contingency sampling should groundwater be encountered*.

- If there were to be a release of a regulated substance during the decommissioning process, could surface water be impacted, either directly or via conduits such as surface drainage systems? If yes, discuss strategy developed to prevent a discharge to surface water or other contingency plans. Any release that results in sheen to surface waters must be reported and cleaned up immediately.

Sample collection methods and analytical procedures:

- Describe the sample collection and analytical methods to be used for this project. The Hydrocarbon Identification analytical procedure specified in OAR 340-122-0218(1)(d) (NWTPH-HCID) must be used for determining whether a confirmed petroleum release exists and then quantified by the appropriate method. For hazardous substances other than petroleum, describe the specific analytical method to be used and sample collection procedures to be followed.

Soil sample locations:

The site assessment plan and site diagram must address where and how samples will be collected.

General Information

- The UST and associated systems must be evaluated for contamination in all areas where contamination is likely to be present. If contamination is observed or suspected *at any time* during decommissioning, samples must be collected from the contaminated soil.
- If water is present in the UST pit, regardless of whether obvious contamination is or is not present, the department must be notified of this fact within 24 hours of discovery.
- If contamination is discovered, the permittee must report the release to the department within 24 hours. If not reported within 24 hours, the licensed service provider must provide the required notice to the department within 72 hours. If contamination is found to be present, removal of the UST may be required.
- Note: This Appendix addresses site assessment plans only. Correct industry practices or codes, safety measures and report preparation requirements for actual decommissioning of the UST system must be complied with at all times.

USTs

- All areas exposed during the uncovering of the UST when it is cut open and cleaned must be examined for signs of contamination. The UST must also be examined for holes by doing an examination of the interior after cleaning. Holes in the UST may be an indication of leakage and contamination.
- For an individual UST, four samples must be collected; one each from beneath both ends of the tank and on each side or as otherwise directed by the department (e.g., only two may be required if collected through a hole cut in the bottom of the tank). For multiple USTs in the same pit, a minimum of one sample must be collected for each 100 square feet of area in the pit. Soil samples must be collected from the native soils located no more than two feet beneath the UST pit in areas where contamination is most likely to be found.

Piping and Dispensers

- In cases where UST components (e.g., underground piping or dispensers) are located above an area to be excavated as part of the UST decommissioning, the area must first be visually assessed and soil samples collected if contamination is observed or suspected before conducting the excavation work.
 - *For underground piping*, a minimum of two soil samples must be collected from the native soils directly beneath the areas where contamination is most likely to be found and must be collected at 20-foot intervals;
 - Include information about the fate of lines containing a regulated substance. Regulated substance line trenches must be opened up and visually assessed during removal of the underground piping and soil samples collected from impacted areas.
 - If lines that contained a regulated substance are to remain in-place, samples must be collected from the native soils directly beneath the areas where contamination is observed, in addition to samples collected at 20 lineal foot intervals beginning at the dispensers.
 - *For dispensers*, at least one soil sample must be collected from the native soils directly beneath each dispenser.
 - Dispenser areas must also be evaluated for signs of contamination during the process of removal. If contamination is observed or suspected, samples must be collected from the contaminated soil. If contamination is not observed, collect one sample from beneath each dispenser.

APPENDIX L

OAR 340-150-0200

Training Elements

The following topics must be covered in each UST system operator training session or by an equivalent training or testing method to meet UST system operation and maintenance training requirements:

- (1) General overview of department UST program administrative requirements:
 - (a) Types of registration certificates (i.e., permits) and process for modification of registration certificates;
 - (b) Notification process and general technical requirements for new UST installation, decommissioning, equipment replacement and retrofits, confirmed releases, suspected releases (including confirmation steps for suspected releases) and other system or test failures;
 - (c) Annual UST compliance fees and invoicing process;
 - (d) General requirements for maintaining financial responsibility;
 - (e) Department process for inspections and technical assistance resources available; and
 - (f) Enforcement process for violations.
- (2) General overview of other regulations pertaining to USTs, including, but not limited to, fire codes, occupational health and safety and any related industry practices pertaining to safety.
- (3) Spill prevention and overfill protection:
 - (a) Rule requirements, including record keeping;
 - (b) Equipment requirements; and
 - (c) Operation and maintenance needs.
- (4) Release detection: For each type of release detection method listed in OAR 340-150-0400 through 340-150-0470 for both USTs and underground piping:
 - (a) Rule requirements, including record keeping;
 - (b) Monitoring and equipment, including third party approval requirements; and
 - (c) Operation and maintenance requirements.
- (5) Corrosion protection, galvanic and impressed current:
 - (a) UST rule requirements (OAR chapter 340, division 150), including record keeping;
 - (b) Equipment requirements; and
 - (c) Operation and maintenance needs, including periodic inspections and testing.
- (6) Lined USTs:
 - (a) Rule requirements, including record keeping; and
 - (b) Operation and maintenance needs, including periodic inspections and testing.

UST SYSTEM OPERATOR TRAINING PROGRAM



State of Oregon
Department of
Environmental
Quality

You have received this mailing because you are listed with the Department as an underground storage tank (UST) owner, permittee, owner of property where a regulated UST is located, or you are a licensed UST service provider.

To increase compliance and protect human health and the environment, the 2001 Oregon Legislature amended laws governing USTs adding a requirement for mandatory operator training. Revised compliance rules for USTs went into effect February 14, 2003. The Department has prepared this mailing to provide you with information about new UST system operator training requirements.

The requirements for the training of UST system operators may be found in Oregon Administrative Rule (OAR) 340-150-0200. DEQ mailed a copy of Division 150 (OAR 340-150-0001 through 340-150-0620) to all permittees and service providers in early March 2003 in an effort to educate the regulated community on the revised rules. Each regulated UST facility in Oregon that dispenses a regulated substance from an UST to a motor vehicle or container must employ trained personnel (i.e., a designated UST system operator) who can properly operate and maintain the UST system. Verification of training completion must be submitted to the Department by March 1, 2004.

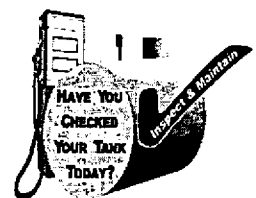
One of the options for meeting the new training requirement is to receive training from a listed training vendor. A training vendor is a person, company or organization listed by the Department that has agreed to present UST system operator training to UST system operators using the training manual developed by the Department. A list of *training vendors* is on the back of this mailing.

Alternatively, you may take the International Code Council's (ICC) national *UST System Operator* examination administered by Promissor, a professional testing company. Upon successfully passing the examination, submit a copy of your score report to the Department. The Department will then send you a video free of charge that covers Oregon-specific UST rules and regulations. After submitting an affidavit stating that you viewed and understood the video, you would then be in compliance with the training requirement.

Training information, including the list of training vendors and known schedules of training dates and locations is posted on the Department's web page at www.deq.state.or.us/wmc/tank/ust-lust.htm. After reading through the information in this mailing or on our web site, please contact one of the listed training vendors if you plan to attend one of their training sessions. If you choose to take the national operator test instead, contact ICC at 800-423-6587 ext. 3208 to request a free candidate bulletin prior to scheduling the examination with Promissor at 800-275-8301. ICC's Candidate Bulletin can also be downloaded from their web site at www.iccsafe.org/certification/bulletin.htm. The cost to take the examination is \$75. Please contact Mitch Scheel at 503-229-6704 with any other questions you may have. Mitch can also be reached at 1-800-452-4011 toll free in Oregon or by e-mail at scheel.mitch@deq.state.or.us.

Note: If you no longer own a regulated UST, please notify us at 503-229-6652 or toll-free in Oregon at 1-800-742-7878.

Environmental Cleanup
and Tanks Section
Land Quality Division
811 SW 6th Avenue
Portland, OR 97204
Phone: (503) 229-6704
(800) 452-4011
Fax: (503) 229-6954
Contact: Mitch Scheel
www.deq.state.or.us



June 2003



Oregon Department of Environmental Quality
Underground Storage Tank Program

DEQ Listed Training Vendors

Ben Thomas Associates
Contact: Ben Thomas
2838 Sunlight Drive
Clinton, Washington 98236
Ph: 866-301-TANK (8265)
Fax: 360-321-4996
E-Mail: bthomas@whidbey.com
<http://www.bentanks.com>

Century West Engineering
Contact: David Einolf
6650 SW Redwood Lane, Suite 300
Portland, Oregon 97224
Ph: 503-419-2130
Fax: 503-639-2710
E-Mail: ust@centurywest.com

Compliance Solutions
Contact: Jeff Kline
10515 E 40th Avenue, Suite 203
Denver, Colorado 80239
Ph: 303-209-6161
Fax: 800-511-4944
E-Mail: comments@csregs.com

Contract Environmental Services
Contact: Jim Richards
2005 SW 198th Avenue
Aloha, Oregon 97006
Ph: 503-201-3813
Fax: 503-642-2051
E-Mail: ces1jim@aol.com

Hahn & Associates
Contact: Phil Ralston
434 NW 6th, Suite 203
Portland, Oregon 97209
Ph: 503-796-0717
Fax: 503-227-2209
E-Mail: pralston@hahnasoc.com

Northwest Pump
Contact: Mike Joyner
2800 NW 31st Avenue
Portland, Oregon 97210
Ph: 503-205-2109
Fax: 206-708-3133
E-Mail: mjoyner@nwpump.com

Petco, Inc.
Contact: Rod Pardi
210 E Albany Avenue
Kennewick Washington 99336
Ph: 509-582-1101
Fax: 509-586-7773
E-Mail: petcoincorporated@hotmail.com

Petcon, Inc.
Contact: Alex Ralston
P.O. Box 6225
Jackson, Mississippi 39288
Ph: 800-852-8374
Fax: 601-939-7312
E-Mail: Petcon@bellsouth.net

Pump, Pipe & Tank Services
Contact: Bob McHenry
P.O. Box 146
Talent, Oregon 97540
Ph: 541-535-6542
Fax: 541-535-5557
E-Mail: pmpipetank@aol.com

ZM Associates
Contact: Thomas Miller
P.O. Box 5457
Portland, Oregon 97228
Ph: 503-223-1589
Fax: 503-296-2961
E-Mail: Thomas@zmassociates.com

REVISED UST RULES NOW IN EFFECT

On January 30, 2003, the Environmental Quality Commission approved revisions to the rules pertaining to underground storage tanks (USTs) in Oregon. These rules were officially filed with the Secretary of State's Office on February 14, 2003, and became effective on that date. Note that these rule amendments only apply to regulated USTs; they do not apply to heating oil tanks.

You have received this mailing because you are listed with the Department as the permittee of at least one regulated UST in Oregon.

Since new requirements and significant changes are included in the revised rules, a copy of Division 150 (UST Compliance Rules) is enclosed with this mailing for your convenience. The Department strongly recommends that you read this mailing in its entirety as it describes rule amendments that affect owners and permittees of USTs.

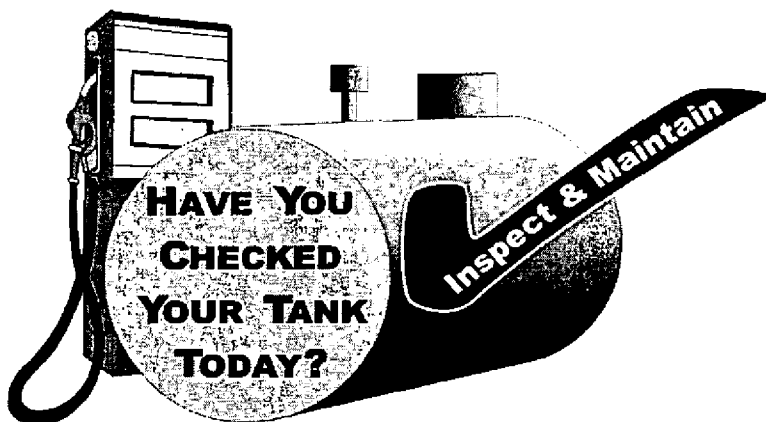
The majority of the revisions to Division 150 were made to clarify existing rule language (particularly federal portions of the regulations) to make reading and understanding the rules easier for the regulated community. The revised rules also include minor changes to Divisions 122 (cleanup) and 160 (licensing) to allow for consistent use of terms and definitions. Revisions to the classification of UST violations in Division 12 (enforcement) were necessary to implement the expedited enforcement process.

A fact sheet is enclosed that describes the revised rules in more detail. To view and download all of the revised UST rules, please visit our web site at <http://www.deq.state.or.us/wmc/tank/ust-lust.htm>. Hard copies are also available by contacting the Land Quality Division reception desk at (503) 229-5913, leaving a message on our Helpline recording at 1-800-742-7878 (toll-free in Oregon) or by Email: tanks.info@deq.state.or.us.



State of Oregon
Department of
Environmental
Quality

Environmental Cleanup
and Tanks Section
Land Quality Division
811 SW 6th Avenue
Portland, OR 97204
Phone: (503) 229-5769
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Fax: (503) 229-6954
Contact: Laurie McCulloch
www.deq.state.or.us



Underground Storage Tank Program Update

Background

Revised compliance rules for Underground Storage Tanks (USTs) went into effect Feb. 14, 2003. To increase compliance and protect human health and the environment, the 2001 Oregon Legislature amended laws governing USTs that have been in place since 1988. The Oregon Department of Environmental Quality (DEQ) has prepared this fact sheet to provide you with information about these changes.

Because new requirements and significant changes are included in the revised rules, DEQ has mailed a copy of Oregon Administrative Rule (OAR) Division 150 (UST Compliance Rules) to all permittees and service providers in an effort to educate the regulated community on the revised rules.

As of January 2003, Oregon had 2,067 operating facilities with 6,111 regulated underground storage tanks.

Since the beginning of the UST Program in Oregon, releases of petroleum have been reported at 6,642 sites. Cleanup is complete on more than two thirds of these sites (nearly 4,800 facilities).

Who is affected by these rule changes?

These regulations are applicable to all owners and permittees of regulated USTs. They do not apply to heating oil tanks. Federal regulations promulgated by the U.S. Environmental Protection Agency (EPA) and previously adopted by DEQ have been incorporated into Oregon Administrative Rules (OAR) for Underground Storage Tanks (Division 150 rules). Requirements for financial responsibility (insurance) for petroleum USTs are included in Division 151 rules.

Tank owners, permittees and licensed UST service providers should read and be familiar with all divisions of Oregon Administrative Rules that pertain to their UST system or occupation. The two most significant requirements are the mandatory training for UST system operators and the expedited enforcement process (i.e., "tickets" for violations that are issued by an inspector while at a facility). DEQ will provide detailed guidance about these new

programs in separate documents expected to be completed in April 2003.

The majority of revisions to Division 150 rules were made to clarify existing rule language (particularly federal portions of the regulations) for the regulated business community.

The revised rules also include minor changes to state rules dealing with environmental cleanups (Division 12) and service providers (Division 160) to allow for consistent use of terms and definitions. Revisions to the classification of UST violations in enforcement rules (Division 112) were necessary to implement the expedited enforcement process.

Why the rules were changed

The primary purpose of DEQ's UST Compliance Program is to prevent and quickly detect leaks from USTs that could cause pollution to soil and groundwater. The proposed rule revisions improve leak detection methods by:

- Requiring new tank systems installed after March 1, 2003, to be accessible for inspection of overfill equipment. This allows for verification that equipment is in place and working properly.
- Requiring corrosion protection on all metallic USTs with no exclusions. Corrosion protection prevents holes that could cause leaks of regulated substances from USTs.
- Specifying conditions where an interstitial monitoring sensor may replace the requirements for annual piping leak tests on pressurized piping. This provision may reduce costs for some tank owners who use the interstitial monitoring method for leak detection.
- Limiting the use of less accurate leak detection methods by Dec. 22, 2008. This provision requires tank owners using inventory control and manual tank gauging (for USTs over 1,000 gallons in size) to switch to a more accurate leak detection method 10 years after the tank was installed or upgraded with corrosion protection, but in no case later than Dec. 22, 2008.

Specific rule changes

Specific rule changes include changes in existing fees and some new fees, the expedited enforcement process, classification of UST



State of Oregon
Department of
Environmental
Quality

Land Quality Division

Underground Storage
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Last Updated: 3/04/03

violations, financial responsibility requirements and other changes to effect environmental protection.

Fees, administrative requirements

Definitions and administrative requirements are included in OAR 340-150-0001 through -0180. The changes made in fees by the 2001 Legislature went into effect July 2001 for all regulated USTs in Oregon. The rules include those fees in OAR 340-150-0110:

- \$85 annual per tank fee (increased from \$65);
- New \$400 fee for each new tank installed;
- New \$75 fee for permit modifications;
- New \$35 fee for late payment of annual compliance fee invoice; and
- Fees for tanks not previously permitted (capped at \$500 per tank).

Mandatory operator training

The revised rules include requirements and specifications for the one-time training of UST system operators in OAR 340-150-0200. Training must be completed by March 1, 2004. A hardship provision for some UST system operators is included in the new rule.

A requirement for the training and record keeping of UST facility *attendants* was deleted from the proposed rules based on public comments. To relieve the burdensome portion of this requirement, but still retain real environmental protection, DEQ instead opted to require emergency response information be available at any facility where fuel is dispensed.

Expedited enforcement process

Expedited enforcement is a pilot program for the assessment and expedited issuance of noncompliance penalties for specific UST violations (see OAR 340-150-0250). Individual penalty amounts of \$75 are specified in the rule; all other penalties are \$50. Penalties from a single inspection cannot total more than \$300. If penalties are more than \$300, participation in the expedited enforcement program is not allowed and enforcement must be conducted through the more formal process.

The pilot program ends Dec. 31, 2005. The expedited process is expected to save time for DEQ when enforcement is necessary. The pilot program will be evaluated during its implementation, and a recommendation on whether or not to continue it will be made to the Oregon Environmental Quality Commission.

Changes necessary to implement the expedited enforcement process required changes to the classification of UST violations (see OAR 340-

012-0067). Failure to have any financial responsibility mechanism is now a Class I violation (previously a Class II default), which is consistent with similar financial responsibility requirements for other DEQ programs.

UST compliance rules

Federal regulations have been incorporated into state administrative rules and reorganized for easier reading (see OAR 340-150-0300 through -0560). New rule sections have been added to improve and specifically address issues that are allowed by federal rules but not clearly stated. A list of reference documents is included as Appendices A-L in Division 150. This increases the readability of the proposed rule by listing information in appendices rather than including it in specific rule language.

Financial responsibility requirements

Federal regulations (40 CFR Part 280, Subpart H) are adopted by reference (see OAR 340-151-0001 through -0025) with some Oregon-specific changes and additions (see OAR 340-151-0025).

Changes pertaining to tank owners, reporting, used tanks and Statistical Inventory Reconciliation (SIR)

The following are some other changes or clarifications that have been made that may affect most tank owners and permittees at some point:

- Tank owners who do their own decommissioning or installation work must pass the same test as an UST supervisor, except that no license or fee by DEQ is required;
- When a facility is sold, all records pertaining to operation and maintenance of the USTs must be given to the new owner;
- All corrosion test failures must be reported to DEQ;
- Used tanks cannot be reinstalled as "new" unless the tank manufacturer certifies that it meets all requirements for a new tank;
- Clarification that line leak detectors are required on all pressurized piping systems (sump sensors are not an acceptable alternative);
- A requirement to check and resolve problems noted with pressurized piping; and
- Use of the Statistical Inventory Reconciliation (SIR) leak detection method. The rule requires that results be available 22 days after each 30-day period, plus four inconclusive results in a 12-month period requires that a different leak detection method be put in place.

There are other changes or clarifications that permittees should note. In the version of Division 150 that is now available, all significant changes have been highlighted for convenience to readers.

UST cleanup definitions

Minor changes were made to allow for consistent use of definitions with Division 150 (see OAR 340-122-0210).

UST service providers & supervisors

Minor changes were made to allow for consistent use of terms and definitions in Division 150 (see OAR 340-160-0005 through -0150). Changes were also made to delete outdated provisions and add new license fees that became effective July 2001 (see OAR 340-160-0150). These include:

- \$300 per year fee for service providers
- \$150 fee every two years for supervisors (up to four licenses with the same expiration date)

Financial responsibility

Compliance with financial responsibility requirements, or insurance, is a DEQ priority. Financial responsibility protects the facility owner or permittee by ensuring that when a petroleum release occurs, the facility will have the resources to do any necessary cleanup and remain a viable business. Financial responsibility protects all Oregonians by ensuring that gas stations, including stations in rural areas, can remain in business. It also ensures that the state is not burdened with the cleanup costs. It is only fair to make certain that all facilities in Oregon pay their share to protect the environment.

In summer 2002, DEQ began systematically requesting all facilities to submit proof of their financial responsibility. All facilities have now been asked to submit verification.

Facilities that do not have financial responsibility will be in violation and subject to enforcement action, which may include civil penalties and suspension of the facility's operating certificate.

Financial responsibility requirements include the following:

- Petroleum producers, refiners and marketers need \$1 million in insurance for 100 or fewer tanks, or \$2 million for more than 100 tanks.
- Nonmarketers need \$500,000 per occurrence if throughput is 10,000 gallons monthly or less, or \$1 million if throughput is more than 10,000 gallons monthly. Aggregate coverage for nonmarketers is the same as for marketers.

- The primary options to demonstrate financial responsibility include the following: corporate guarantee, environmental insurance coverage (this is the most common form for small- to medium-sized businesses), surety bond, letter of credit, trust fund and self-insurance companies with a tangible net worth of at least \$10 million. Additional options are available for local governments.

Two important financial responsibility documents are available:

- *Dollars and Sense: Financial Responsibility Requirements for Underground Storage Tanks* (EPA publication 510-K-95-004)
- *List of Known Insurance Providers for Underground Storage Tanks* (EPA publication 510-B-00004)

Late & non-payment of compliance fees

DEQ thanks the many tank owners who promptly pay their annual tank permit compliance invoices every year. However, despite the fact that UST facilities receive invoices each January, DEQ continues to have problems with approximately 12 percent of tank owners who do not pay on time, or do not pay at all. As in any business, this gap in revenue affects DEQ's ability to perform activities that the Legislature directs the agency to do.

There is now a \$35 late fee imposed for every invoice that is not paid within 45 days after receipt of the invoice.

Avoid this fee by planning ahead. Try to set aside funds to pay your invoice soon after it is received. You can calculate what the fee for a particular year will be by multiplying the number of tanks you have by \$85. If you are having financial difficulties, call DEQ as soon as you receive the invoice and a payment schedule can be arranged.

For worst-case scenarios in which payment is not received after several notices, DEQ is required by law to refer the account to the Oregon Department of Revenue or a private agency for collection.

Did you receive this fact sheet, but you no longer own or operate USTs?

DEQ would like to hear from you if you no longer own or operate an underground storage tank or own property where a tank is located. This program update was mailed to everyone DEQ has on record as owning a tank, operating a tank (permittee) or owning property where a tank is located. If you no longer have any association

with underground tanks, please contact Steve Paiko, DEQ, Portland, at (503) 229-6652, or toll-free in Oregon at (800) 452-4011. If you know the facility ID number, please have this number available when contacting Steve.

Change in ownership?

If you are thinking of selling or leasing your interest in an underground storage tank to someone else, you may need a permit modification form.

Please note that the operating certificate for a UST facility automatically terminates within 120 days if you fail to notify DEQ of a change in:

- ownership of the property
- ownership of the tank
- permittee
- the nature of the activities and operations -- see OAR 340-150-0102 (1).

Contact DEQ if you need the permit modification form, or get the forms from DEQ's Web site at

www.deq.state.or.us/wmc/tank/ust-lust.htm.

There is a \$75 fee for any permit modification.

Let DEQ know of work on your tank system

Let DEQ know if work on your tank system will take place at your facility. This is one of the most common violations DEQ encounters. Most tank owners and service providers know that they must notify DEQ in writing 30 days before installing or decommissioning a tank, and again verbally three days before actually starting the work. For any work that involves replacement of critical spill, overfill, leak detection and corrosion protection equipment and piping repair or replacement, DEQ must be notified in advance. Both the service provider and the owner can be cited for violations for failure to notify DEQ. When in doubt, call your local DEQ UST inspector and let them know what work is being performed.

Help sought in Operator Training Program

Individuals, companies or organizations that would like to provide training for Underground Storage Tank system operators are encouraged to contact DEQ now. Training vendors must register with DEQ and agree to provide training according to information provided in the training manual developed by the agency. For more information about presenting training sessions, please contact Mitch Scheel, Portland, at (503) 229-6704 or toll-free in Oregon at 1-800-452-4011.

For more information

The revised rules for UST compliance, financial responsibility and UST service providers are available in hard copy or on DEQ's Web site: www.deq.state.or.us/wmc/tank/ust-lust.htm

For hard copies, contact DEQ's Land Quality Division, Portland, at (503) 229-5913, or leave a message on our Help Line recording toll-free in Oregon at 1-800-742-7878.

Check our Web site often, as we will be adding new guidance documents and fact sheets as soon as they become available. DEQ will soon have written guidance for two topics: the UST system operators training and expedited enforcement program.

Contacting DEQ tank staff

DEQ Underground Storage Tank specialists are available at regional offices throughout the state.

In Northwest Oregon (Clatsop, Clackamas, Columbia, Multnomah, Tillamook and Washington counties):

- Portland, 2020 SW Fourth Ave., Suite 400, (503) 229-5263

In Western Oregon (Benton, Coos, Curry, Douglas, Jackson, Josephine, Lane, Lincoln, Linn, Marion, Polk and Yamhill counties):

- Salem office: 750 Front St. NE, Suite 120, (503) 378-8240
- Eugene office: 1102 Lincoln St., Suite 210, (541) 686-7838
- Medford office: 201 W. Main St., Suite 2-D, (541) 776-6010
- Coos Bay office: 340 N. Front St., (541) 269-2721

In Eastern Oregon (Baker, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Sherman, Umatilla, Union, Wallowa and Wasco counties):

- Bend office: 2146 NE Fourth, Suite 104, (541) 388-6146
- The Dalles office: Columbia Gorge Community College, 400 E. Scenic Drive, Building 2, (541) 298-7255
- Pendleton office: 700 SE Emigrant, Suite 330, (541) 276-4063.

Alternative formats

Alternative formats (such as Braille or large type) of this document can be made available. Contact DEQ's Office of Communications, Portland, for more information at (503) 229-5317.

PROPOSED UST RULES- PUBLIC INFORMATION PACKAGE



State of Oregon
Department of
Environmental
Quality

The Department of Environmental Quality (DEQ) is proposing to revise the regulations for regulated underground storage tanks (USTs). Note that these proposed rule amendments only apply to regulated USTs; they do not apply to heating oil tanks.

You have received this mailing because you are listed as a tank owner, permittee, owner of property where a regulated tank is located, UST service provider, UST supervisor or other interested person.

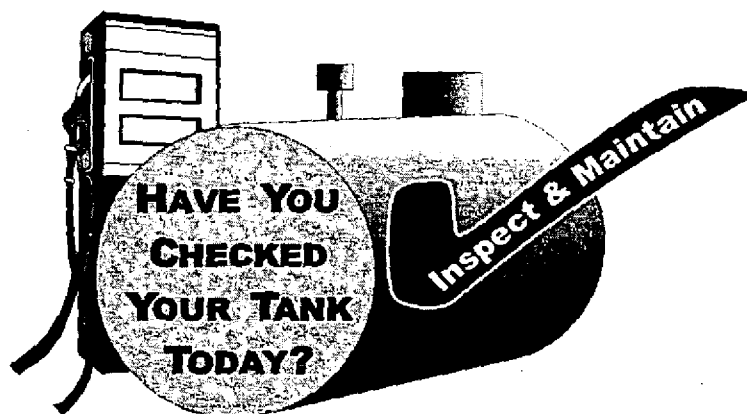
The Department strongly recommends that you read this package in its entirety as it contains wide-ranging rule proposals that will affect owners and permittees of regulated USTs.

We encourage you to attend one of the 14 public hearings to be held around the state from September 19 – October 9, 2002, to hear more information on the proposed rule changes, ask questions and submit comments. The public comment period begins on September 1, 2002 and ends on October 14, 2002.

Please note that the deadline for submittal of written comments is 5:00 pm, October 14, 2002.

A fact sheet is enclosed with this mailing that describes our current inspection process for regulated UST facilities. For more information on DEQ's UST Program, visit our web site at <http://www.deq.state.or.us/wmc/tanks/ust-lust.htm>.

Note: If you no longer own a regulated UST, please notify us at 503-229-6652 or toll free in Oregon at 1-800-742-7878.



**State of Oregon
Department of Environmental Quality**

Memorandum

Date: August 21, 2002
To: Interested and Affected Public
Subject: Rulemaking Proposal and Rulemaking Statements
Underground Storage Tank Compliance Rule Revisions

This memorandum¹ contains information on a proposal by the Department of Environmental Quality (Department) to amend rules regarding requirements for underground storage tanks (USTs) found in Oregon Administrative Rules (OAR) Chapter 340, Divisions 150, 151, 160, 122 and 12. Please note that these proposed rule amendments only apply to regulated USTs; they do not apply to heating oil tanks.

The proposed rule amendments would:

- Modify leak detection and prevention requirements for UST systems;
- Add mandatory training for UST system operators (must complete training by January 1, 2004);
- Provide a new, expedited enforcement process for some violations and revise the classification of UST violations used in the process; and
- Reformat and clarify language of federal UST regulations incorporated into proposed Oregon Administrative Rules.
- Make minor changes to definitions in the UST Cleanup rules and UST Service Provider rules, including clarifying license procedure changes.

The Commission has the statutory authority to address this issue under Oregon Revised Statutes (ORS) 466.746. These rules implement ORS 466.706 through 446.835, 466.994 and 466.995.

What's in this Package?

Attachments to this memorandum provide details on the proposal as follows:

- | | |
|--------------|--|
| Attachment A | The official statement describing the fiscal and economic impact of the proposed rule (required by ORS 183.335). |
| Attachment B | A statement providing assurance that the proposed rules are consistent with statewide land use goals and compatible with local land use plans. |
| Attachment C | Questions to be answered to reveal potential justification for differing from federal requirements. |
| Attachment D | List of UST Advisory Committee members. |

Please see the contact information section at the end of this notice for information on how to obtain a copy of the draft rules.

Background on Development of the Rulemaking Proposal

Why is there a need for the rule?

Amendments by the 2001 legislature (House Bill 2264) to laws governing underground storage tanks require the Department to adopt rules to implement:

- A mandatory training program for all UST system operators; and

¹ THIS DOCUMENT IS AVAILABLE IN ALTERNATE FORMAT (E.G., LARGE PRINT, BRAILLE) UPON REQUEST. PLEASE CONTACT THE DEPARTMENT'S OFFICE OF COMMUNICATION AND OUTREACH AT 503-229-5713 OR TOLL FREE IN OREGON AT 1-800-452-4011 TO REQUEST AN ALTERNATE FORMAT.

- A pilot program to expedite enforcement of UST compliance violations.

This rulemaking proposal improves existing UST regulations (federal rules previously adopted by reference) by reformatting and clarifying language, thereby making it easier for tank owners to understand and comply with the requirements. Also, Oregon-specific additions to the federal regulations adopted by reference are proposed to improve leak detection and prevention requirements for USTs, which is an important pollution prevention aspect of the UST program (refer to Attachment C for more information).

How was the rule developed?

Between October 2001 and May 2002, the UST Advisory Committee assisted the Department in the development of proposed rules (refer to Attachment D for a list of Committee members). Committee members and Department staff participated in three subcommittees to focus on technical, enforcement and training issues. The work produced by each subcommittee was presented to the full UST Advisory Committee as a rough draft in February 2002. The Committee provided input on several policy issues and recommended changes to rule language after discussion of each rule section.

Documents relied upon in the development of this rulemaking proposal include:

- Oregon Administrative Rules, Chapter 340, Division 150 (UST regulations) & Division 12 (Enforcement Procedure and Civil Penalties)
- Federal regulations for USTs, 40 CFR Part 280, Subparts A through H
- Oregon UST statutes, ORS 466.706 through 466.835, 466.994 and 466.995

To review these documents, please refer to the contact information section at the end of this notice.

Who does this rule affect including the public, regulated community or other agencies, and how does it affect these groups?

The proposed rules principally affect existing and future owners of regulated USTs and persons designated as UST system operators (who are responsible for the daily operation of the USTs). Local government and state agencies will be affected if they own UST systems. The general public will benefit from the improved environmental protection of groundwater resources that compliance with these proposed rule amendments achieves. UST equipment vendors, petroleum industry organizations and environmental consulting firms interested in providing operator training may be interested in this rulemaking proposal.

Although all tank owners will be affected by the proposed rules, small business (i.e., individuals who own one facility) will be affected the most by the new requirements for training and enforcement. The potential financial benefits and impacts of these regulations are discussed in Attachment A.

How will the rule be implemented?

The Department will notify all known tank owners and permittees of UST facilities, property owners where USTs are known to be located, legislative officials, licensed UST service providers and other interested parties of the proposed changes through direct mailing(s), notices through local media and during 14 public hearings to be held statewide.

If this proposal is adopted by the Commission, the Department will provide guidance documents for tank owners to explain the UST system operator training requirements, new enforcement process and general rule requirements in "reader friendly" formats.

Are there time constraints?

Yes. The Department plans to submit an application for final authorization of the UST Program to the Environmental Protection Agency by January 31, 2003. Any proposed rule amendments must first be filed with the Secretary of State's office to meet application requirements.

Hearing Process Details

The Department is conducting public hearings¹ at which comments will be accepted either orally or in writing. The hearings will be held as follows:

Date: September 19, 2002 Time: 7:00 pm Place: Clatsop Comm. College 1653 Jerome Avenue Patriot 326 Astoria	Date: September 20, 2002 Time: 7:00 pm Place: ODOT 3012 Island Avenue La Grande	Date: September 23, 2002 Time: 7:00 pm Place: DEQ Headquarters 811 SW 6 th Avenue Conf. Room 3A Portland
Date: September 30, 2002 Time: 7:00 pm Place: DEQ Pendleton Office 700 SE Emigrant Suite 330 Pendleton	Date: October 1, 2002 Time: 2:00 pm Place: Medford City Hall 411 W 8 th Room 340 Medford	Date: October 1, 2002 Time: 7:00 pm Place: Columbia Gorge Comm. College 400 E Scenic Drive Bldg. 1, Rm. 1.162 The Dalles
Date: October 2, 2002 Time: 7:00 pm Place: Treasure Valley Comm. College 650 College Blvd. Work Force Training Center – Room 1 Ontario	Date: October 3, 2002 Time: 7:00 pm Place: DEQ Bend Office 2146 NE Fourth #104 Bend	Date: October 4, 2002 Time: 2:00 pm Place: DEQ Salem Office 750 Front Street, NE Suite 120 Salem
Date: October 7, 2002 Time: 2:00 pm Place: DEQ Headquarters 811 SW 6 th Avenue Conf. Room 3A Portland	Date: October 7, 2002 Time: 7:00 pm Place: Klamath County Government Center 305 Main Street Room 219 Klamath Falls	Date: October 8, 2002 Time: 2:00 pm Place: DEQ Eugene Office 1102 Lincoln Suite 210 Eugene
Date: October 8, 2002 Time: 7:00 pm Place: Coos Bay Public Library 525 Anderson Myrtlewood Room Coos Bay	Date: October 9, 2002 Time: 7:00 pm Place: Tillamook PUD 1115 Pacific Avenue Carl Rawe Meeting Rm Tillamook	

The Department will hold an information session including a video presentation overview of the proposed rules approximately 30 minutes prior to the start of each hearing. Department staff will be available to answer questions before the hearing starts. *The time listed above is the start time of the information session.*

Deadline for submittal of Written Comments: Must be received by: 5:00 pm, Oct. 14, 2002

¹ Please notify DEQ about any SPECIAL PHYSICAL OR LANGUAGE ACCOMMODATIONS YOU MAY NEED AS FAR IN ADVANCE OF THE HEARING AS POSSIBLE. TO MAKE THESE ARRANGEMENTS, PLEASE CONTACT THE DEPARTMENT'S OFFICE OF COMMUNICATION AND OUTREACH AT 503-229-5317 OR TOLL FREE IN OREGON AT 1-800-452-4011. PEOPLE WITH HEARING IMPAIRMENTS MAY CALL THE DEPARTMENT'S TDD NUMBER AT 503-229-6993.

Written comments may be presented at a hearing or to the Department any time prior to the date and time noted above. Comments may be submitted by facsimile, e-mail¹, or mailed to the address listed in the contact information section at the end of this notice. *The Department cannot accept comments from any party after the deadline for submission of comments has passed.* To be considered, your comments must be received prior to the close of the comment period.

What Happens After the Public Comment Period Closes?

Following closure of the public comment period, the Department will prepare a report which summarizes the oral testimony presented at the hearings and written comments submitted during the public comment period. The Commission will receive a copy of the Presiding Officer's report. Each public hearing will be tape recorded, but the tape will not be transcribed.

The Department will review and evaluate the rulemaking proposal in light of all information received during the comment period. Following this review, the rules may be presented to the Commission as originally proposed or with modifications made in response to public comments received.

The Commission will consider the Department's recommendation for rule adoption during one of its regularly scheduled public meetings. The targeted meeting date for consideration of this rulemaking proposal is December 13, 2002, in Portland. This date may be delayed if needed to provide additional time for evaluation and response to comments received during the public comment period.

You will be notified of the time and place for final Commission action if you present oral testimony at the hearing or submit written comments during the comment period. Otherwise, if you wish to be kept advised of this proceeding, you should request that your name be placed on a mailing list regarding this proposal.

Contact for More Information

If you would like more information on this rulemaking proposal, to receive a hard copy of the proposed rules, to have your name added to a mailing list, or to submit written comments, please contact:

Laurie McCulloch
Senior UST Policy Coordinator
811 SW Sixth Avenue
Portland, OR 97204

Direct Phone: 503-229-5769
Toll Free in Oregon: 1-800-452-4011
Facsimile: 503-229-6954
E-mail: mcculloch.laurie@deq.state.or.us

Copies of the draft rules will be available on or before September 1, 2002 on

DEQ's website at

<http://www.deq.state.or.us/wmc/tanks/ust-lust.htm>, or hard copy by request.

¹ NOTE REGARDING SUBMISSION OF WRITTEN COMMENTS: E-MAIL COMMENTS WILL BE ACKNOWLEDGED IMMEDIATELY. IF THERE IS A DELAY BETWEEN SERVERS, E-MAILS MAY NOT BE RECEIVED BEFORE THE DEADLINE. E-MAIL WILL NOT BE CONSIDERED RECEIVED UNLESS THE SENDER RECEIVES AN ACKNOWLEDGEMENT OR RECEIPT.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340
Proposed Rulemaking
STATEMENT OF NEED AND FISCAL AND ECONOMIC IMPACT

Underground Storage Tank Compliance Rule Revisions
Attachment A

This form accompanies a Notice of Proposed Rulemaking

Title of Proposed Rulemaking:	Underground Storage Tank Compliance Rule Revisions
Need for the Rules	<p>Amendments by the 2001 legislature (House Bill 2264) to laws governing underground storage tanks require the Department to adopt rules to implement:</p> <ul style="list-style-type: none">▪ A mandatory training program for all UST system operators; and▪ A pilot program to expedite enforcement of UST compliance violations. <p>This rulemaking proposal also improves existing UST regulations in Oregon that were previously adopted by reference to federal rules. The proposed amendments reformat and clarify the existing rules, making it easier for tank owners to understand and comply with the requirements. Oregon-specific additions to federal regulations are proposed to improve leak detection and prevention requirements for USTs, which is an important pollution prevention aspect of the UST program.</p>
Documents Relied Upon for Rulemaking	<ul style="list-style-type: none">• Oregon Administrative Rules, Chapter 340, Division 150 (UST regulations) & Division 12 (Enforcement Procedure and Civil Penalties)• Federal regulations for USTs, 40 CFR Part 280, Subparts A through H• Oregon UST statutes, ORS 466.706 through 466.835, 466.994 and 466.995 <p>Copies of these documents are available for review at the DEQ Headquarters office, UST Program (8th Floor) 811 SW 6th Avenue, Portland, Oregon or on our web page at www.deq.state.or.us/wmc/tank/ust-lust.htm.</p>
Fiscal and Economic Impact Overview	<p>There is no economic impact on tank owners expected as a result of the proposed revisions to existing state and federal UST regulations; some new requirements that are expected to have a net neutral cost impact are discussed on page two of this statement. However, the two new requirements for UST operator training and the expedited enforcement process are anticipated to have the following economic impact on all tank owners:</p> <ul style="list-style-type: none">▪ Economic impact for added costs ranging from \$50 to \$250 to obtain training from private vendors; and▪ Economic benefit through the potential for reduced cost of enforcement penalties with expedited process vs. traditional enforcement penalties.
General public	<p>There is no direct economic impact on the general public as a result of the proposed rule revisions. The one-time cost to have UST system operators trained is not anticipated to result in increased costs of motor fuel or services provided by non-retail tank owners.</p>
Small Business	<p>The mandatory operator training requirements and the expedited enforcement process will have some financial impact on all tank owners regardless of the size of the business. Very small business owners (e.g., individuals who own only one UST facility) will likely be affected the most.</p> <p>Since penalties associated with violations under the expedited enforcement process (\$50 to \$75 for each violation) are smaller than a tank owner would otherwise experience with traditional enforcement (generally greater than \$1,000), there is an anticipated economic benefit to small business owners who would also have received a penalty under the current enforcement process. Some businesses may receive minimal penalties under this new expedited process that otherwise would not currently receive penalties due to current enforcement guidance and program priorities.</p> <p>Although the anticipated cost of training is relatively low, it is possible that some small business owners, especially in rural areas, may need to close their business for one to two days to attend a training session. To address this concern, a hardship provision is included in the</p>

Attachment A, Page 1

proposed rules which allow owners of a single retail facility to independently review training materials developed by the Department in lieu of attending an in-person training session.

Large Business

Large business owners would experience the same potential financial effect as small business owners. Although the cost of training is multiplied by the number of UST system operators that a business owner employs, some large business owners may choose to conduct their own training sessions, which would likely result in savings in both dollars and the time spent by employees to attend the training.

Local Government

Local governments owning regulated USTs will be affected by the operator training and enforcement requirements the same as either large or small business owners.

**State Agencies
DEQ**

The proposed amendments will increase costs for the Department to implement the operator training program. The Department will use existing staff resources to develop a training manual to support training presented by vendors (approx. 0.3 FTE for two months). In early 2004, the Department will use existing staff (approx. 0.5 FTE for three months) to verify and enforce initial compliance with the operator training requirements and to audit trainers. After this initial period, the Department expects only minimal resources will be required to periodically audit an estimated 5-6 vendors and industry organizations that will provide the training to UST System Operators.

The new enforcement process may reduce the time required by inspectors for UST enforcement activities. Because much of the time spent on enforcement activities is in ensuring that tank owners correct violations, actual resource savings may not be achieved unless tank owners make an effort to ensure they are in compliance before the Department inspects their facility. The Department will provide guidance documents to aid tank owners in this effort.

Other agencies

State agencies owning regulated USTs will be affected the same as either large or small business owners.

Assumptions

The cost to tank owners to obtain the required operator training is estimated to range from \$50 to \$250 per person depending upon the type of training option selected:

- \$ 50 - \$ 75 Training provided by industry groups using training manual developed by the Department.
- \$ 70 - \$ 80 Standardized national proficiency test (does not include training).
- \$200 - \$225 On-line, web-based training and testing program provided by a private vendor.
- \$200 - \$250 Training course presented in several different states by a private vendor.

The cost for large business owners to conduct their own training program has not been estimated. Because most companies that own numerous UST facilities already have a training program in place, minor changes to an existing program may be all that is required.

**Neutral Costs and
Voluntary Changes**

There are some proposed rule changes that could have a fiscal impact, but these have been evaluated and determined to be either a voluntary expense or have a net neutral cost.

- *New tank systems installed after January 1, 2003 must have access to inspect overfill equipment.* Most new facilities are built to allow access, as it is important to check overfill equipment. Existing rules require tank owners to provide proof that the equipment operates properly. Making this requirement clear in rule now could potentially save an owner the cost of removing concrete later.
- *Requiring all metal tanks to have corrosion protection without an exception process in rule.* Very few facilities in Oregon are located in areas where the combination of geologic conditions and climate would not cause corrosion to metal tanks. The cost of the evaluation by an expert could be as much as the cost of adding corrosion to a single tank. However, if a tank owner could demonstrate that corrosion protection was not technically necessary (and proving it was cost effective for them), existing statutes allow a person to request a variance from the rules. By deleting this option from the rules, it avoids the existing problem of some tank owners spending funds to try to demonstrate that corrosion protection is not needed, thinking that it will save them money.
- *Specifying conditions where an interstitial monitoring sensor may replace the requirement for annual piping leak tests on pressurized piping.* Although allowing this exception for additional testing may reduce operating costs, it is unknown how many tank owners may choose to do this or if their equipment meets the conditions for exceptions.
- *Limiting the use of less accurate leak detection methods after December 22, 2008.* Existing rules limit use of inventory control and manual tank gauging methods to 10 years after installation or date corrosion protection was added. The latest date for tanks to be in compliance was December 22, 1998. With new technologies available, it would very unusual for a new tank to be installed now using one of these methods as the sole means of leak detection. Setting a final date gives certainty to tank owners.

- *Tank owners must pass a national proficiency examination to install or decommission their own tanks. The decision to perform the work themselves is voluntary. The cost for an examination is \$70-\$80.*

Housing Costs

The Department has determined that this proposed rulemaking will have no effect on the cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single family dwelling on that parcel.

Administrative Rule Advisory Committee

Between October 2001 and July 2002, the UST Advisory Committee assisted the Department in the development of the proposed rule revisions. Committee members and Department staff participated in three subcommittees to focus on technical, enforcement and training issues. The work produced by each subcommittee was presented to the full UST Advisory Committee as a rough draft in February 2002. The Committee provided input on several policy issues and recommended changes to rule language after discussion of each rule section.

Laurie J. McCulloch
Prepared by

Laurie J. McCulloch, Rule Writer
Printed name

8/20/02
Date

Jim Roys
Approved by DEQ Budget Office

Jim Roys, Budget Manager
Printed name

8/20/02
Date

DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340
Proposed Rulemaking
LAND USE EVALUATION STATEMENT

Underground Storage Tank Compliance Rule Revisions
Attachment B

1. Explain the purpose of the proposed rules.

This proposal would amend rules regarding requirements for underground storage tanks (UST) found in OAR Chapter 340, Divisions 150, 151 and 12. The proposed rule amendments would:

- Modify leak detection and prevention requirements for UST systems;
- Add mandatory training for UST system operators (must complete training by January 1, 2004);
- Provide a new, expedited enforcement process and revise the classification of UST violations used in the process; and
- Reformat and clarify language of federal UST regulations incorporated into proposed Oregon Administrative Rules.

Note that these proposed rule amendments pertain to regulated USTs and do not include heating oil tanks.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program? ✓ No


In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

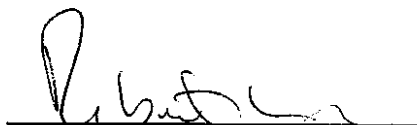
The permit requirements for installation, operation and decommissioning of underground storage tanks have not previously been identified as a program affecting land use. The proposed amendments to the underground storage tank rules are not actions that would cause the Department to change its determination regarding land use.

3. If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Not applicable.

Approved:


Dick Pedersen
Administrator
Land Quality Division


Roberta Young
Intergovernmental Coordinator

8-15-02
Date

DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340
Proposed Rulemaking
REPLATIONSHIP TO FEDERAL REQUIREMENTS

Underground Storage Tank Compliance Rule Revisions
Attachment C

Answers to the following questions identify how the proposed rulemaking relates to federal requirements and potential justification for differing from federal requirements. The questions are required by OAR 340-011-0029.

1. Are there federal requirements that are applicable to this situation? If so, exactly what are they?

The federal regulations pertaining to underground storage tanks (USTs or tanks) were promulgated by the Environmental Protection Agency (EPA) in 1988 (40 CFR Part 280 Subparts A-H). The Oregon Department of Environmental Quality (DEQ) adopted these regulations with several minor modifications (OAR 340-150-0003) in 1990. Oregon formally adopted requirements for financial responsibility (insurance) in 1998.

The proposed amendments are more stringent or broader in scope than existing federal requirements in the following ways:

Broader:

- Adds requirement for operators of UST systems to obtain training in the operation and maintenance of USTs. There is no federal requirement for training.
- Provides greater efficiency for DEQ and more certainty for tank owners in enforcement of violations. Federal UST regulations do not include enforcement elements.
- Ensures that tank owners who install, decommission or test their own tanks have the technical knowledge to do so safely and correctly by adding the requirement that owners take the same proficiency examination as UST supervisors. There is no federal requirement for proficiency testing of persons who perform work on USTs.

More stringent:

- Improves leak detection and prevention requirements through additional reporting requirements for leak test failures and changes in equipment. Federal requirements have only basic reporting requirements for reporting releases, suspected releases, and installation and decommissioning of USTs.
- Ensures tank owners maintain coverage to pay for cleanup of any leaks that occur by adding a requirement for tank owners and insurance companies to notify DEQ when insurance coverage is canceled or not renewed. Federal requirements only require notification when an owner's coverage is canceled and they have failed to obtain another financial responsibility mechanism.
- Requires used USTs that have been removed from the ground be certified by an UST manufacturer in writing before the UST can be reused at the same or another location. Federal requirements only require that the UST must meet requirements for new tanks without addressing the reuse of USTs.

2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?

UST requirements are predominantly performance based.

3. Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?

Yes.

4. Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?

Yes. Existing federal regulations can be difficult to understand. The proposed rules clearly explain what actions a tank owner must take to comply with the regulations.

5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?

No.

6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?

Not applicable.

7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)

Yes. The proposed revisions clarify the UST requirements so all users can better understand the regulations. The notification requirement when insurance is canceled or not renewed allows DEQ to verify that tank owners maintain a financial responsibility mechanism at all times; this ensures that some tank owners do not have a financial advantage over others by not paying premiums.

8. Would others face increased costs if a more stringent rule is not enacted?

Possibly. Most of the proposed modifications to federal rules improve leak detection efforts and ensure tank owners maintain coverage to pay for the cleanup of any leaks that do occur. Without these revisions, the public and nearby business could be affected by the pollution that results or the state may be required to bear the expense of cleanup.

9. Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?

Yes. The reasons why proposed procedural, reporting or monitoring requirements are broader or more stringent than federal (refer to question no. 1.) are detailed below:

- DEQ must be notified when an UST system is temporarily closed, corrosion tank tightness tests fail, release to a secondary containment system occurs, or financial responsibility insurance is canceled or not renewed.
 - These changes allow DEQ to determine trends for different types of UST systems or leak prevention measures and ensure that all permit requirements are met. Without insurance, the cost of cleanup could bankrupt a company and require the state to pay for it.
- Tank owners must pass a national examination to install or decommission their own tanks.
 - Tank owners who do their own work must be able to do so safely and properly to prevent leaks.

UST Compliance Rule Revisions
Relationship to Federal Requirements

- Repaired and used USTs must be certified by a tank manufacturer as meeting all performance standards before the UST can be operated.
 - Prevents leaks from defective USTs and tank owners avoid additional costs of replacement if defect found after installation is complete.
- Mandatory training of operators.
 - Almost 70% of the facilities inspected by DEQ do not meet release detection requirements. Operator training is necessary to ensure that UST systems are maintained and operated correctly to prevent or detect leaks.
- A Pilot program for enforcement process.
 - New process expedites enforcement through the use of "tickets" instead of traditional civil penalties. Reduces time spent on enforcement activities by DEQ and immediately informs tank owners of problems and actions necessary to correct violations while the inspector is present to explain details and provide technical assistance. Penalty amounts in the pilot program are much lower than traditional civil penalties. Process is similar to enforcement process used by the EPA.

10. Is demonstrated technology available to comply with the proposed requirement?

Yes.

11. Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?

Yes. The primary purpose of the UST compliance program is to prevent and quickly detect leaks from USTs that could cause pollution to soil and groundwater. The proposed rule revisions improve leak detection methods or prevent leaks by:

- Requiring new tank systems installed after January 1, 2003 to be accessible for inspection of overfill equipment. This proposal allows verification that equipment is in-place and working properly.
- Requiring corrosion protection on all metallic USTs with no exclusions. Corrosion protection prevents holes from developing in USTs that could leak regulated substances.
- Specifying conditions where an interstitial monitoring sensor may replace the requirement for annual piping leak tests on pressurized piping. This provision may reduce costs for some tank owners that use the interstitial monitoring method for leak detection.
- Limiting the use of less accurate leak detection method by December 22, 2008. This provision requires tank owners using inventory control and manual tank gauging (for USTs over 1,000 gallons in size) to switch to a more accurate leak detection method after this date.

**DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340
Proposed Rulemaking
LIST OF UST ADVISORY COMMITTEE MEMBERS**

**Underground Storage Tank Compliance Rule Revisions
Attachment D**

<u>Name</u>	<u>Affiliation</u>	<u>Address</u>
Ron Bergeson	Bergeson-Boese & Assoc.	65 Centennial Loop, Eugene
Jim Hickey	Environmental Insurance Agency	P.O. Box 23605, Portland
Steve Fletcher	Northwest Pump & Equipment	2800 NW 31 st , Portland
Cliff Olson	Marc Nelson Oil Products	1555 Silverton Rd, NE, Salem
Nicoletta Endres	Oregon Gasoline Dealers Assoc.	P.O. Box 2285, Lake Oswego
Chris Moul	ARCO	P.O. Box 820001, Portland
Brian Doherty	Miller Nash	111 SW 5 th , Portland
Phil Murray	Truax Harris Energy	P.O. Box 607, Wilsonville
Steve O'Toole	Oregon Petroleum Marketers Assoc.	7070 SW Fir Loop, Suite 150, Tigard
Bruce Kwasney	Ace Tank	5107 NE 158 th , Portland
Kent Elliott	Elliott, Powell, Baden & Baker	1521 SW Salmon, Portland

UST Facility Inspections

Background

The Oregon Department of Environmental Quality (DEQ) Underground Storage Tank (UST) Program has begun a program of regular inspections at gas stations and other facilities that operate underground storage tanks.

Regular inspections, combined with technical assistance and training for tank owner/operators and an effective enforcement process, are part of an overall strategy to ensure that all USTs are operated and maintained so that leaks are prevented or detected early and Oregon's groundwater is protected from releases from these facilities.

This fact sheet provides information about the method DEQ uses to select facilities for inspection and the information that is available to help a tank owner prepare for an inspection.

All operating UST facilities were required to come into compliance with state and federal requirements by December 1998. The requirements addressed the type of equipment they were required to use and how to operate and maintain that equipment. Recent inspections by DEQ indicate that not all facilities have the required equipment in place, and very few (only 1/3 of inspected facilities) are operating and maintaining the equipment they have so that it could prevent a release or provide early detection of a release to the environment.

Even more concerning is the fact that DEQ has documented catastrophic tank releases from a few operating facilities in the state that went completely undetected. These releases have impacted groundwater, soil and surface waters of the state. In some cases, they have also required that individuals be evacuated from neighboring buildings.

Financial verification

In addition to inspecting facilities, DEQ is also verifying that all tank owners meet requirements for financial responsibility (i.e., insurance). DEQ will check every regulated UST facility between now and early 2003.

Whether a facility will be inspected next week or next year, DEQ urges all tank owners to review what is required for equipment operation and maintenance at their site now. This is the best way to protect the environment from the impact of a release from underground storage tanks.

Selection criteria

DEQ will routinely inspect facilities for compliance with equipment and operation/maintenance requirements. The selection criteria used each year may vary. DEQ has developed specific criteria in order to ensure that it:

- Inspects the tanks most likely to leak or with the greatest potential environmental impact if a leak does occur;
- Leverages limited DEQ resources (trained inspectors and funding); and
- Has a random sample from around the state.

DEQ has already completed 155 inspections, and will be inspecting as many facilities in the future as our resources will allow.

These facilities are selected based on a combination of the following criteria:

- Tank age and material (i.e., facilities with the oldest steel tanks will be a top priority);
- Facilities located in vulnerable area (e.g. near drinking water sources, wetlands, etc.);
- Facilities with high-volume usage or whose compliance self-certification with 1998 equipment requirements was not DEQ-verified.

Geographic location is then "layered" over this initial selection to maximize efficiency. For example, if the oldest steel tank in a particular town or community is a long distance from a DEQ office, other facilities in the area will be selected as well to avoid making a long trip for only one inspection. Facilities are not included in the inspections if they have recently been inspected by DEQ or the U.S. Environmental Protection Agency (EPA). In addition, DEQ may make substitutions to inspect facilities that the agency has received complaints about or are otherwise of concern to DEQ.

Scheduling of inspections

Inspections are divided among DEQ's three regions among inspectors located in Portland, The Dalles, Pendleton, Bend, Medford, Coos Bay, Eugene and Salem. Inspectors send a letter to each facility to be inspected, requesting that the owner/operator contact DEQ to schedule the inspection. Due to the fact that each inspection can take several hours and the facility owner's uninterrupted participation is needed, this scheduling process is very important.

DEQ includes a copy of the document "How to Prepare for an UST Compliance Inspection" with the letter sent to schedule the inspection.



State of Oregon
Department of
Environmental
Quality

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Underground Storage
Tank Program,
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Portland, OR 97204

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DEQ Tank Program Web
site:
www.deq.state.or.us/wmc/tank/ust-lust

Contact:
Laurie McCulloch
(503) 229-5769

Alternative formats:
Alternative formats of this
document can be made
available. Contact DEQ's
Office of Communications
and Outreach, Portland, at
(503) 229-5317.

Last Updated: 8/20/2002
By: Mitch Scheel

www.deq.state.or.us

UST Compliance Inspection

To land quality
then under-
ground stora

Guidance for Owners and Operators of
Underground Storage Tank Facilities in Oregon

CONTRACT
ENVIRONMENTAL
SERVICE

2005 SW 198th AVE.
ALOHA, OR 97006

503/259-2961



October 2001



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HOW TO USE THIS GUIDANCE

Each Permittee is expected to be familiar with the UST system components and equipment at their facility as well as the UST regulations. With this knowledge, you can review this guide and determine the "Compliance Items" that apply to your facility. Compliance Items are specific requirements listed in state and federal rules that the DEQ inspector will be checking. This guide provides a listing of specific compliance items for new and existing UST systems, including release detection methods, spill prevention, overfill prevention, corrosion protection, and repairs.

Compliance items are labeled A to J by section. All facilities are required to provide the information listed in Parts A, B, C, E, F, H, I, and J of this document. Depending on the type of release detection method(s) in use at your facility, sections in Parts G.1 through G.8 have been completed. Each section has been labeled to match the report form that DEQ inspectors use in the field.

TECHNICAL ASSISTANCE

After the inspection (or during, if appropriate), the UST inspector will be happy to answer any technical assistance questions you may have. In addition, each inspector carries copies of a number of guidance documents and regulations that they will be glad to provide you with.

AFTER THE INSPECTION

If you "pass" the inspection without any problems, DEQ will send you a brief letter to document your compliance status at the time of the inspection. You will also be notified if any violations are observed during the inspection and issued a "Notice of Noncompliance". The Notice will include specific actions that must be taken to correct the violations and a schedule for completing these actions. Once these corrections have been made, DEQ will send you a brief letter to document that compliance has been achieved.

Underground Storage Tank Information

Tank #	1	2	3	4	5	6
Permit #						
Product						
Volume, Gal.						
Install Date						
Tank Type						
C.P. Date						
Lining Date						
Pipe Type						
Pipe Model						

Review the information or question for each item listed that pertains to your facility. Items that pertain to your facility that you need to complete are Hi-Lited in Yellow, **those items that have been verified are typed in red.** Check the box when you have assembled the required information or understand the requirement and can demonstrate compliance.

Part A Facility and Owner/Operator Information (Section 1)

Provide the following information regarding property ownership, tank ownership and the person responsible for the day-to-day operation of the facility.

Name, Address, telephone and Fax numbers for the:
Tank Owner, Property Owner and Permittee

☐ Current information is available for all three and ready to be given to DEQ.

Part B Underground Storage Tank Information (Section 2)

Provide or verify facility information that includes: UST facility number and Operating Certificate number. For each tank: permit number (i.e. ABCD), your tank ID, product stored, tank diameter and length, volume, installation date, tank type and installation date for corrosion protection and lining, if applicable.

☐ Current information is available and ready to be given to DEQ.

Part C Facility Layout Diagram (Section 2)

Provide a detailed "as built" diagram of the entire facility. The diagram must include the location of all UST system components including all USTs, piping, dispensers, spill prevention devices, overfill prevention devices and all elements of any UST or piping corrosion control system.

☐ As-built diagram is available and ready to be given to DEQ.

Part D Financial Responsibility (Section 4)

Compliance Items

- ☐ How is the requirement met? (insurance, bond, letter of credit, etc.)
- ☐ Are the documents written in acceptable EPA language?
- ☐ Is the amount of coverage correct?
- ☐ Is the mechanism of compliance current?

Part E Spill Prevention (Section 2)

Compliance Items

- ☐ Spill devices are required on all tanks.
- ☐ The fill pipe is fitted with spill containment.
- ☐ The turbine pump is fitted with spill containment.
- ☐ The dispensers are fitted with spill containment.
- ☐ The containment devices are clean and dry.
- ☐ Is there any visual sign of soil impacted by spills? If so, was the release reported to DEQ?

Part F Overfill Prevention (Section 2)

Compliance Items

- ☐ Overfill devices are required on all tanks.
- ☐ Tanks have fill pipe shutoff devices.
- ☐ Tank vents have ball float valves.
- ☐ Tanks have high level alarms.

Release Detection Methods

The release detection method used at your facility is listed below. Your methods for USTs and piping, and the corresponding sections (Parts G.1 through G.8) listing the Compliance Items for that method are shown below.

Method for USTs (Section 6)

- o Automatic Tank Gauging - G.1
- o Interstitial Monitoring - G.2
- o Statistical Inventory Reconciliation (SIR) - G.3
- o Inventory Control & TTT - G.3
- o Manual Tank Gauging - G.4
- o Manual Tank Gauging & TTT - G.4
- o Vapor Monitoring - G.6
- o Groundwater Monitoring - G.5

Methods for Pressurized Piping (Section 7)

- o Annual Line Tightness Test - G.7
- o Automatic line leak Detector - G.7
- o Electronic Line Leak Detectors - G.7A
- o Interstitial Monitoring - G.2
- o Vapor Monitoring - G.6
- o Groundwater Monitoring - G.5

Methods for Suction Piping (Section 7)

- o Interstitial Monitoring - G.2
- o Line Tightness Test (3yr) - G.7
- o SIR - G.3
- o Groundwater Monitoring - G.5
- o Vapor Monitoring - G.6
- o None Needed - Safe Suction - G.8
- o None needed - No underground piping

Part G.1 Automatic Tank Gauging (ATG)

Compliance Items

- o The make and model of the ATG and sensing probe =
- o The ATG and sensing probe(s) were installed by =
- o The ATG manufacturer's information is available at site.
- o The ATG has been installed, calibrated and repaired as per the manufacturer's instructions.
- o The ATG has received third party verification of device performance. Documentation is available.
- o The presence of tank probes can be verified in each tank.
- o The ATG control unit is connected and operating.
- o The tank test is conducted at the required product volume and time.
- o 12 months of test records are available.
- o Has the ATG ever indicated a release? If so, was the release reported to DEQ?

Part G.2 Interstitial Monitoring- USTs and Piping

Compliance Items

All Systems

- o Monitoring equipment is accessible and functional.
- o There is a record of monthly monitoring conducted for each of the last 12 months.

Electronic Systems

- o The monitoring unit is operational.
- o There is a record of equipment maintenance and calibration.

Summary

- o Has the monitoring device ever indicated a release? If so, was the release reported to DEQ?

Part G.3 Inventory Control, Tightness Testing and Statistical Inventory Reconciliation

Compliance Items

- o Are readings recorded each operating day and reconciled monthly?
- o Is the correct calibration chart used to determine volume to the nearest 1/8 inch of product depth?
- o Are tank inventory readings recorded before and after each delivery?
- o Can gauge stick be read to nearest 1/8 inch and measure full height of product in tank?
- o Are monthly water readings measured to the nearest 1/8 inch and used in the inventory calculation?
- o Does each dispenser have a totalizer with a currently calibrated meter?

Statistical Inventory Reconciliation (SIR) only

Compliance Items

- o Has the SIR method received third party approval for tanks? Have documentation available.
- o Has the SIR method received third party approval for piping? Have documentation available.
- o Have two consecutive monthly inconclusive results occurred in the last 12 months? If so, was the release reported to DEQ?

Tightness Test only

Compliance Items

- o Has the tightness test method been third party approved? Have documentation available.
- o Did an Oregon licensed Service Provider for Tightness Testing perform the tightness test?
- o Has the ten-year exemption from advanced leak detection expired?

All Methods

Compliance Items

- o Are 12 months of monitoring data available?
- o Is the monthly reconciliation calculation performed each month?
- o Does the fill pipe drop tube extend to within one foot of the tank bottom?
- o Did all tanks pass the last tightness test?
- o Has a release or a suspected release ever occurred? If so, was the release reported to DEQ?

Part G.4 Manual Tank Gauging

Compliance Items

- o Do records show that level measurements are taken at start and end of a 36-, 44- or 58-hour period?
- o Is product added or removed during the gauging period?
- o Are measurements recorded weekly?
- o Is the monthly reconciliation calculation performed correctly?
- o Is the tank inventory product height at the start and end of the gauging period the average of two stick readings?
- o Is the weekly and monthly variation between start and end less than standard for tank size and test period?
- o Can gauge stick be read in 1/8 inch increments to full height of tank volume?
- o Is MTG the sole leak detection method for a tank with a volume of greater than 1,000 gallons?
- o Is Tank Gauging and Tightness Testing the sole method for a tank greater than 2,000-gallon tank?
- o Has the 10-year exemption from advanced leak detection expired?
- o Has a tightness test been completed in the last 5 years?
- o Are 12 months of monitoring records available?
- o Has a suspected release occurred? If so, was the release reported to DEQ?

Part G.5 Groundwater Monitoring

Compliance Items

- o Is the well registered with the Oregon Water Resources Department?
- o Was the well installation approved by DEQ before it was installed? Have documentation available.
- o Is the well log available and on file?
- o Is the well clearly marked and secure?
- o Can water be observed in the well?
- o Is groundwater monitoring used as the release detection method for all USTs at this facility?
- o Is groundwater monitoring used as the release detection method for all piping at this facility?
- o Was a site assessment completed prior to installation of the groundwater monitoring wells?
- o Is documentation of monthly monitoring available and on file?

Part G.5 Groundwater Monitoring (continued)

Compliance Items

- o Is the specific gravity of the stored product less than 1.0?
- o Is the hydraulic conductivity of the soil between the UST system and wells less than 0.01 cm/sec?
- o Was the hydraulic conductivity determined by a registered geologist and is a report available?
- o Is the groundwater more than 20 feet from the ground surface?
- o Are the wells sealed from the ground surface to the top of the filter pack?
- o Are the wells located within the UST excavation or as close as feasible?
- o Does the screened interval intercept groundwater under both high and low water conditions?
- o Can continuous or manual monitoring detect the presence of 1/8 inch of product on water?
- o Is the groundwater monitored manually on a daily basis?
- o Is the groundwater monitored continuously and are all system components present and operational?
- o Does the well cause any increased risk to human health or the environment?
- o Has a release ever been detected? If so, was the release reported to DEQ?

Part G.6 Vapor Monitoring

Compliance Items

- o Was the well installation approved by DEQ before it was installed? Have documentation available.
- o Is the well clearly marked and secure?
- o Are the well caps tight?
- o Is the well constructed to prevent interference by moisture?
- o Is the well free of debris and has been recently checked?
- o Was the UST excavation zone assessed prior to vapor monitoring system installation?
- o Is the backfill material sufficiently porous?
- o Is the stored product or tracer sufficiently volatile to be detected by the equipment used?
- o Will rainfall, groundwater, soil moisture or other interference delay a 30-day detection time?
- o Will background contamination interfere with the detection method?
- o Will the vapor monitor detect any significant increase above background?
- o Has a release ever been detected? If so, was the release reported to DEQ?

Automatic Systems

- o Is the control box accessible and the power on?
- o Is documentation of continuous monitoring for last 12 months available?
- o Is the monitoring equipment accessible and functional?
- o Is the vapor sensor maintained and calibrated annually, as per manufacturer's instructions?

Manual Systems

- o Is documentation of daily monitoring available for the last 12 months?
- o Is the monitoring equipment accessible and functional?
- o Is the vapor sensor maintained and calibrated annually, as per manufacturer's instructions?

Part G.7 Line Leak Detectors

Compliance Items

- o The line leak detector(s) make and model =
- o The detector(s) is connected to an automatic shut off device.
- o The detector(s) is connected to an automatic flow restrictor.
- o The detector(s) is connected to a continuous audible or visual alarm.
- o All detectors passed the last annual test.
- o The detector leak detection rate is less than or equal to 3 gph at 10 psi.
- o Do any of the detectors indicate a release? If so, was the release reported to DEQ?

Part G.7A Electronic Line Leak Detectors

Compliance Items

- o The electronic line leak detector is 3rd party certified to perform the line test.
- o The detector is set at 0.1 or 0.2 gph.
- o The proper records are available. (monthly test for 0.2 gph, or annual test for 0.1 gph)
- o Have the detectors ever indicated a release? Has the release been reported to the DEQ?

Part G.8 Safe Suction

Compliance Items

- o The piping system slopes to the tank and operates at atmospheric pressure.
- o Only one check valve is used.
- o The check valve is located directly under the dispenser.
- o How were these requirements verified? Have documentation available.

Part H Corrosion Protection for Steel (Section 5)

Galvanic C P - Tanks and Piping

Compliance Items

- o When was the corrosion protection system installed?
- o Has the tank passed the NACE RP-0285 evaluation?
- o Has the piping passed the NACE RP-0285 evaluation?
- o What was the date of the 6-month inspection?
- o When is the first 3-year inspection due?
- o When was the last 3-year inspection performed?
- o When is the next 3-year inspection due?
- o Are all corrosion protection tests on file?

Impressed Current C P - Tanks and Piping

Compliance Items

- o When was the corrosion protection system installed?
- o Is the system connected to power and turned "ON"?
- o Is the 60-day inspection log present and current?
- o Has the tank passed the NACE RP-0285 evaluation?
- o Has the piping passed the NACE RP-0285 evaluation?
- o What was the date of the 6-month inspection?
- o When was the first 3-year inspection due?
- o What was the date of the last 3-year inspection?
- o When is the next 3-year inspection due?
- o Are the results of all corrosion protection tests on file?

Internally Lined Tanks (No C. P.)

Compliance Items

- o Was an internal inspection completed prior to lining? What method of inspection was used?
- o When was the lining installed?
- o When is the 10-year inspection due?
- o When is the first 5-year inspection due?
- o What is the date of the last inspection?
- o When is the next inspection due?

Part I Cathodic Protection System Testing

Provide the results of all required cathodic protection system tests. Make sure that the test contractor provides a detailed report that includes a diagram with the location of reference electrode(s) used during measurement of soil-to-structure potentials clearly marked.

- o Current information is available and ready for DEQ to review.

Part J Facility Upgrade and Repair History (Section 3)

The Permittee must notify DEQ prior to any upgrade work and document work performed. You must also keep records of any repairs made to system components and specifically list significant problems associated with equipment or materials.

o Current information is available and ready for DEQ to review.

The following compliance items were found during my inspection:

- 1. Financial responsibility =**
- 2. Corrosion Protection =**
- 3. Spill Containment =**
- 4. Overfill Prevention =**
- 5. Tank Leak Detection =**
- 6. Line Leak Detection =**

The following must be done to maintain compliance:

- 1. Pay annual DEQ tank fees.**
- 2. Keep Financial Responsibility mechanism current.**
- 3. Perform annual ATG operability certification and keep last twelve (12) months of data.**
- 4. Perform annual line and line leak detector testing.**
- 5. Keep all containments clean and dry.**
- 6. Perform routine O & M so that equipment (impact valves, emergency shut-off, etc.) are operating optimally.**
- 7. Keep a matenance and repair log.**
- 8. Keep non-reportable incident log.**
- 9. Prepare emergency response plan and have employees familiarize themselves with it.**

If you have any questions about your underground storage tank system, please call me so that we can resolve the problem promptly and correctly.

Jim

I. ENFORCEMENT

A. CLASSIFICATION OF VIOLATIONS

Violations pertaining to Underground Storage Tank Systems are Classified as follows:

1. Class One: carries \$7500 fine w/option of expedited enforcement (on site citation & possible civil Pen)

 - (a) Violating a requirement or condition of a commission or Department order.
 - (b) Failure to report a release or suspected release from an UST system or a heating oil tank.
 - (c) Failure to perform an investigation or confirmation of a suspected release.
 - (d) Failure to establish or maintain the required financial responsibility mechanism.
 - (e) Failure to initiate and complete the investigation or cleanup of a release from an UST system or a heating oil tank.
 - (f) Failure to submit reports from the investigation or cleanup of a release from an UST system or heating oil tank.
 - (g) Failure to provide or allow access to premises or records.
 - (h) Failure to apply for and be issued the appropriate general permit registration certificate before decommissioning, installing or operating an UST, not otherwise classified.
 - (i) Failure to install spill and overfill protection equipment that will prevent a release or to be able to demonstrate to the Department that the equipment is properly functioning.
 - (j) Failure to install, operate or maintain a method or combination of methods for release detection for an UST system such that the method can detect a release from any portion of the UST system.
 - (k) Failure to install or use equipment that is properly designed and constructed to protect any portion of the UST or piping from corrosion.
 - (l) Failure to operate and maintain corrosion protection such that it continuously provides protection to the UST system.
 - (m) Failure to permanently decommission an UST system.
 - (n) Failure to obtain approval from the Department before installing or operating vapor or groundwater monitoring wells as part of a release detection method.
 - (o) Installing, repairing, replacing or modifying an UST system in violation of any rule adopted by the Department, not otherwise Classified.
 - (p) Systematic failure to conduct testing, monitoring or to keep records.
 - (q) Failure to initiate and complete free product removal in accordance with OAR 340-122-0235.
 - (r) Providing installation, modification, repair, replacement, decommissioning or testing services on an UST system or providing soil matrix cleanup services at an UST facility without an UST service or soil matrix cleanup service provider license.
 - (s) Using fraud or deceit to obtain an UST service provider, soil matrix cleanup service provider, heating oil tank service provider or supervisor license or demonstrating negligence or incompetence in performing UST or other tank services.
 - (t) Failure to assess the excavation zone of a decommissioned or abandoned UST when directed to do so by the Department.
 - (u) Any other violations related to UST systems or heating oil tanks that cause or pose significant harm to public health or the environment.

2. Class Two: \$5000 fine

- (a) Failure to conduct release detection monitoring and testing activities for USTs or piping, not otherwise classified.
- (b) Failure to conduct corrosion protection monitoring and testing activities for USTs or piping, not otherwise classified.
- (c) Failure to conform to performance standards and requirements and third party evaluation and approval for UST system release detection methods or equipment or corrosion protection equipment, not otherwise classified.
- (d) Continuing to use a method or methods of release detection after period allowed by rule has expired.
- (e) Failure to use or maintain spill or overfill prevention equipment, not otherwise classified.
- (f) Failure to meet all requirements for a financial responsibility mechanism, not otherwise classified.
- (g) Failure to have a trained UST System Operator for an UST facility after March 1, 2004.
- (h) Failure to apply for a modified general permit registration certificate.
- (i) Failure to have an operation certificate for all compartments or chambers of a multichambered or multicompartment UST when at least one compartment or chamber has an operation certificate.
- (j) Installing, repairing, replacing or modifying an UST or UST equipment or conducting a soil matrix cleanup without providing the required notifications.
- (k) Failure to decommission an UST in compliance with the statutes and rules adopted by the Department, including, but not limited to, performance standards, procedures, notification, general permit registration and site assessment requirements.
- (l) Providing installation, modification, decommissioning or testing services on an UST system or providing soil matrix cleanup services at an UST facility that does not have the appropriate general permit registration certificate.
- (m) Failure by a distributor to obtain the identification number for each UST and operation certificate number before depositing a regulated substance into an UST.
- (n) Failure by a distributor to maintain a record of all USTs into which it deposited a regulated substance.
- (o) Allowing the installation, modification, decommissioning or testing of an UST system or soil matrix cleanup at an UST facility by any person not licensed by the Department.
- (p) Failure to provide information as required by OAR 340-150-0135(6) or as requested by the Department.
- (q) Failure to submit checklists or reports for UST installation, modification or suspected release confirmation activities.
- (r) Failure to comply with integrity assessment inspection schedules or requirements for internally lined USTs.
- (s) Allowing the performance of heating oil tank services or supervision at a heating oil tank by any person not licensed by the Department.
- (t) Providing heating oil tank services at a heating oil tank without a heating oil tank service provider or supervisor license.
- (u) Failure to submit a corrective action plan (CAP) in accordance with the schedule or format established by the Department pursuant to OAR 340-122-0250.
- (v) Failure by an owner or permittee to pass the appropriate national examination before performing installation, decommissioning or testing services on an UST system.

- (w) Supervising the installation, modification, repair, replacement, decommissioning, testing or soil matrix cleanup of an UST system without a supervisor license.
 - (x) Failure by an owner or permittee to provide the identification number for each UST or operation certificate number to persons depositing a regulated substance into an UST.
 - (y) Any other violation related to UST systems or heating oil tanks not otherwise classified.
3. Class Three: \$50⁰⁰ Fine
- (a) Failure by a person who sells an UST to notify the new owner or permittee of the Department's general permit registration requirements.
 - (b) Failure to maintain release detection records for USTs or piping if the failure does not constitute a significant operational compliance violation.
 - (c) Failure to maintain required manufacturer's information or third party evaluation documents for approved methods or equipment.
 - (d) Failure to maintain training records for an UST system operator.
 - (e) Failure to keep records of UST system repair, modification or replacement work.

FIELD CITATIONS

- Exclusion from participation in the expedited enforcement process exists if:
 - The total field penalty amount for all violations identified during a single inspection or file review exceed \$300.
 - One or more Class I violations are documented.
 - A field penalty or civil penalty is issued for the same violation at the same UST facility within the previous three years.
- The Department determines eligibility for the expedited process at its discretion.
- The Department will take appropriate enforcement action in accordance with OAR Chapter 340, Division 12 for any documented violations or conditions that exclude participation in the expedited enforcement process.
- Each Class II UST violation listed in OAR 340-012-0067(2) is assigned a field penalty amount of \$50, except for Class II violations meeting the following circumstances, which are assigned a field penalty amount of \$75.
 - Failure to conform to performance standards and requirements and third party evaluation and approval for UST system release detection methods by using a release detection method that does not have third party evaluation and approval.
 - Use of a method or methods of release detection as the primary release detection method after the period allowed for such use by rule has expired.
 - Failure to conduct required release detection monitoring and testing activities for USTs or piping by not monitoring or testing for the presence of a release every 30 days or daily as required.
 - Failure to conduct required release detection monitoring and testing activities for USTs by not performing a tank tightness test in accordance with the required schedule for release detection method or as necessary for confirmation of a suspected release.
 - Failure to conduct required release detection monitoring and testing activities for USTs or piping by failing to ensure that groundwater and vapor monitoring release detection systems are functioning properly to detect a release from all portions of the system that contain a regulated substance.

- Failure to conform to performance standards and requirements and third party evaluation and approval for UST system release detection methods or equipment by using the manual tank gauging release detection method for an UST larger the 2,000 gallons capacity.
 - Failure to conform to performance standards, requirements, third party evaluation, and approval for UST system release detection methods or equipment by not having a line leak detection devise that is operational or able to detect a leak in underground piping.
 - Failure to conduct required corrosion protection monitoring and testing activities for USTs or piping by not conducting an inspection after the first six months of operation or subsequent tests according to schedule.
 - Failure to conduct required corrosion protection monitoring and testing activities for USTs or piping by not conducting an initial tank integrity inspection or periodic internal lining inspections.
 - Failure to have an operating certificate for all compartments or chambers of a multichambered or multicompartment UST when at least one compartment or chamber has an operating certificate.
 - Failure to apply for modified operation certificate when a change in tank ownership, permittee, or property owner has occurred.
 - Failure to provide complete documentation to demonstrate financial responsibility coverage.
 - Failure to have a trained UST system operator for an UST facility by February 2004.
- Each Class III violation listed in OAR 340-012-0067(3) is assigned a field penalty amount of \$50 when the owner or permittee has received prior notice of the violation through a field citation and has not corrected the violation.
 - Any violation of UST rules that also violates a final order incorporated into a field citation may be excluded from the expedited process at the Department's discretion.
 - Permittees issued a field citation have 30 calendar days from the date of issuance to submit payment for the total field penalty amount. Payment is deemed submitted when received by the Department.
 - By submitting payment, the permittee agrees to accept the field citation as the final order by the commission and to waive any right to an appeal or any other judicial review of the determination of violation, compliance schedule or assessment of the field penalty in the field citation.
 -
 - **CIVIL PENALTIES AND ORDERS**

The Notice of Assessment of Civil Penalty and/or Department order initiates a formal administrative enforcement process. It outlines DEQ's finding of facts, identifies the laws or regulations DEQ believes were violated, invites you to attend an informal discussion, and gives you information about how to appeal. If you accept DEQ's findings, the case will be closed once you perform the actions required by the Order and pay the penalty.

The amount of the civil penalty reflects the severity, frequency, and duration of the alleged violation(s). Other factors considered are history of compliance or noncompliance with environmental laws, degree of negligence, and economic benefit gained through noncompliance. DEQ's explanation about how these factors were applied are listed on the Exhibits (s) attached to the Notice of Assessment of Civil Penalty and/or Department Order.



Since 1960

PORTLAND 435 NE Hancock
Portland, OR 97212
(503) 262-2587
FAX (503) 268-9664

SEATTLE 6530 5TH Place South
Seattle, WA 98108
(206) 763-7867
FAX (206) 783-9006

TRI-CITIES 200 S. 20th Ave
Pasco, WA 99301
(509) 543-2018
FAX (509) 543-2051

336920

830

SOLD TO FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

414580

SHIP TO SAME
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

INVOICE NO.	104177
PAGE	1
DATE	06/07/05

PLEASE PAY ON INVOICE - REMIT TO 435 NE HANCOCK - PORTLAND, OR 97212 - NO STATEMENT ISSUED UNLESS REQUESTED

REFERENCE NUMBER	SHIP DATE	SALES PERSON	TERMS	TAX CODE	DOC. NO.	W/H	FREIGHT	SHIP VIA	
LINDA	06/01/05	B (DRB)	NET 10TH	ORMULPOR	096997	01	BILL	SERVICE	
ITEM	DESCRIPTION	ORDERED	SHIPPED	BACK ORDER	U/M	PRICE	COST	PER	EXTENSION
	LINDA CALLED ON 5/31/05 AND REPORTED DIESEL PROBE OUT ON UNLEAD TANK #2 - INCON 1001 503-978-6546								
LABOR	LABOR, (On-Site/Shop Service)	1.0	1.0	.0	EA	72.00	72.00	EA	72.00
TRAVEL	LABOR, (Travel)	1.0	1.0	.0	EA	72.00	72.00	EA	72.00
MILEAGE	MILEAGE, (Vehicle Expense)	30	30	0	EA	.65	.65	EA	19.50
SHOP	SUPPLIES, (Environmental Fees)	1	1	0	EA	14.50	14.50	EA	14.50
	6/1/05 ARRIVED AT SITE AND TESTED. REWIRED & REPROGRAMMED UNIT. TESTED & LEFT IN WORKING ORDER. S/O 96997 SJC								
RECEIVED									
JUN 17 2005									
FOSS MARITIME A/P									
Sent G. 2e)									
1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE 2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL 3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE HERON SHALL APPLY TO THIS SALE 4. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.		MERCHANDISE	MISCELLANEOUS	DISCOUNT	TAX	FREIGHT	TOTAL DUE		
		178.00	.00	.00	.00	.00	178.00		

PAST DUE ACCOUNTS SUBJECT TO 1 1/2% INTEREST CHARGE PER MONTH, 18% ANNUAL RATE

25% RESTOCK FEE ON ALL RETURNED MERCHANDISE

ORIGINAL



Since 1988

PORTLAND
435 NE Hancock
Portland, OR 97212
(503) 282-2597
FAX (503) 280-9864

SEATTLE
6530 5TH Place South
Seattle, WA 98108
(206) 763-7867
FAX (206) 763-9008

TRI-CITIES
200 S. 20th Ave
Pasco, WA 99301
(509) 543-2018
FAX (509) 543-2021

50040 W - 488

INVOICE NO.	104177
PAGE	1
DATE	06/07/05

SOLD TO 830
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

SHIP TO SAME
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

PLEASE PAY ON INVOICE - REMIT TO 435 NE HANCOCK - PORTLAND, OR 97212 - NO STATEMENT ISSUED UNLESS REQUESTED

REFERENCE NUMBER	SHIP DATE	SALES PERSON	TERMS	TAX CODE	DOC NO	W/H	FREIGHT	SHIP VIA	
LINDA	06/01/05	B (DRB)	NET 10TH	ORMULPOR	096997	01	BILL	SERVICE	
ITEM	DESCRIPTION	ORDERED	SHIPPED	BACK ORDER	U/M	PRICE	COST	PER	EXTENSION
	LINDA CALLED ON 5/31/05 AND REPORTED DIESEL PROBE OUT ON UNLEAD TANK #2 - INCON 1001								
	503-978-6546								
LABOR	LABOR, (On-Site/Shop Service)	1.0	1.0	.0	EA	72.00	72.00	EA	72.00
TRAVEL	LABOR, (Travel)	1.0	1.0	.0	EA	72.00	72.00	EA	72.00
MILEAGE	MILEAGE, (Vehicle Expense)	30	30	0	EA	.65	.65	EA	19.50
SHOP	SUPPLIES, (Environmental Fees)	1	1	0	EA	14.50	14.50	EA	14.50
	6/1/05 ARRIVED AT SITE AND TESTED. REWIRED & REPROGRAMMED UNIT. TESTED & LEFT IN WORKING ORDER. S/O 06997 SJC								
RECEIVED		REC'D JUN - 9 2005							
JUN 17 2005									
FOSS MARITIME A/P									
Sent 6.20									
1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE 2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL 3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE 4. HERON SHALL APPLY TO THIS SALE 5. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.		MERCHANDISE	MISCELLANEOUS	DISCOUNT		TAX	FREIGHT	TOTAL DUE	
		178.00	.00	.00		.00	.00	178.00	

1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE
2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL
3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE
HEREON SHALL APPLY TO THIS SALE
4. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.

PAST DUE ACCOUNTS SUBJECT TO 1 1/2% INTEREST CHARGE PER MONTH, 18% ANNUAL RATE
ORIGINAL

25% RESTOCK FEE ON ALL RETURNED MERCHANDISE

JUN 20 2005 3:01PM HP LHSKJEL 3200

P.10

Confidential Business Information

00014465

Foss Maritime Company

660 West Ewing Street Seattle, WA 98119-1587
Telephone: (206) 281-3800 Fax: (206) 281-4742

Check No. - 40004355

Check Date - 07/15/05

INVOICE	DATE	DESCRIPTION	GROSS	DEDUCTIONS	AMOUNT PAID
104177	060705		178.00		178.00
			----- 178.00	-----	----- 178.00

Bank of America
North Carolina

66-798
531

CHECK NO. 40004355



Foss Maritime Company
660 West Ewing St.
Seattle, WA 98119-1587
Telephone: (206) 281 - 3800
FAX: (206) 281 - 4742

336920

DATE	AMOUNT
07/15/05	\$*****178.00

VOID IF NOT CASHED IN 60 DAYS

PAY

ONE HUNDRED SEVENTY EIGHT AND 00/100 *****
TO THE ORDER OF:

MASCOTT EQUIPMENT
435 N.E. HANCOCK STREET
PORTLAND OR 97212

COPY NOT NEGOTIABLE

AUTHORIZED SIGNATURE



Since 1960

PORTLAND
435 NE Hancock
Portland, OR 97212
(503) 282-2587
FAX (503) 288-9664

SEATTLE
6530 5TH Place South
Seattle, WA 98108
(206) 763-7867
FAX (206) 763-9006

TRI-CITIES
200 S. 20th Ave
Pasco, WA 99301
(509) 543-2018
FAX (509) 543-2051

INVOICE NO.	098158
PAGE	1
DATE	02/04/05

SOLD TO 830
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127
336920

398432

SHIP TO SAME
FOSS MARITIME
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

PLEASE PAY ON INVOICE - REMIT TO 435 NE HANCOCK - PORTLAND, OR 97212 - NO STATEMENT ISSUED UNLESS REQUESTED

REFERENCE NUMBER	SHIP DATE	SALES PERSON	TERMS		TAX CODE		DOC. NO.	W/H	FREIGHT	SHIP VIA	
516978	02/02/05	B (DRB)	NET 10TH		ORMULPOR		091313	01	BILL	UPS	
ITEM	DESCRIPTION		ORDERED	SHIPPED	BACK ORDER	U/M	PRICE		COST	PER	EXTENSION
INTS-RA2	REMOTE ALARM, AUDIBLE/VISUAL		1	1	0	EA	325.00		325.00	EA	325.00
SERIAL #100660											
RECEIVED FEB 6 2005 FOSS MARITIME											
REC'D FEB - 7 2005											
1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE 2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL 3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE HERON SHALL APPLY TO THIS SALE 4. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.			MERCHANDISE	MISCELLANEOUS	DISCOUNT		TAX		FREIGHT	TOTAL DUE	
			325.00	.00	.00		.00		7.40	332.40	

PAST DUE ACCOUNTS SUBJECT TO 1 1/2% INTEREST CHARGE PER MONTH, 18% ANNUAL RATE

25% RESTOCK FEE ON ALL RETURNED MERCHANDISE

ORIGINAL

Foss Maritime Company660 West Ewing Street Seattle, WA 98119-1587
Telephone: (206) 281-3800 Fax: (206) 281-4742

Check No. - 233170

Check Date - 03/16/05

INVOICE	DATE	DESCRIPTION	GROSS	DEDUCTIONS	AMOUNT PAID
98158	020405		332.40		332.40
			-----	-----	-----
			332.40		332.40

Bank of America
North Carolina66-798
531

CHECK NO. 00233170

**Foss Maritime Company**
660 West Ewing St.
Seattle, WA 98119-1587
Telephone: (206) 281 - 3800
FAX: (206) 281 - 4742

336920

DATE	AMOUNT
03/16/05	\$*****332.40

VOID IF NOT CASHED IN 60 DAYS

PAYTHREE HUNDRED THIRTY TWO AND 40/100 *****
TO THE ORDER OF:MASCOTT EQUIPMENT
435 N.E. HANCOCK STREET
PORTLAND OR 97212**COPY NOT NEGOTIABLE**

AUTHORIZED SIGNATURE



Since 1969

PORTLAND
435 NE Hancock
Portland, OR 97212
(503) 282-2587
FAX (503) 288-9864

SEATTLE
6530 5TH Place South
Seattle, WA 98108
(206) 763-7867
FAX (206) 763-9006

TRI-CITIES
200 S. 20th Ave
Pasco, WA 99301
(509) 543-2018
FAX (509) 543-2051

INVOICE NO.	098961
PAGE	1
DATE	02/24/05

SOLD TO 830
FOSS MARITIME 336920
9030 NW SAINT HELENS ROAD
PORTLAND, OR 97231-1127

SHIP TO 1
FOSS MARITIME
9030 NW ST HELENS ROAD
PORTLAND, OR 97231

PLEASE PAY ON INVOICE - REMIT TO 435 NE HANCOCK - PORTLAND, OR 97212 - NO STATEMENT ISSUED UNLESS REQUESTED

REFERENCE NUMBER	SHIP DATE	SALES PERSON	TERMS		TAX CODE	DOC NO	W/H	FREIGHT	SHIP VIA	
LINDA	02/03/05	B (DRB)	NET 10TH		ORMULPOR	092853	01	BILL	SERVICE	
ITEM	DESCRIPTION		ORDERED	SHIPPED	BACK ORDER	U/M	PRICE	COST	PER	EXTENSION
	2/3/05 LINDA CALLED AND REQUESTED SERVICE TO PROGRAM THEIR TS1001 EXTERNAL OVERFLOW ALARM - ELECTRICIAN JUST INSTALLED/WIRED									
LABOR	LABOR, (On-Site/Shop Service)		.5	.5	.0	EA	72.00	72.00	EA	36.00
TRAVEL	LABOR, (Travel)		1.0	1.0	.0	EA	72.00	72.00	EA	72.00
MILEAGE	MILEAGE, (Vehicle Expense)		30	30	0	EA	.65	.65	EA	19.50
SHOP	SUPPLIES, (Environmental Fees)		1	1	0	EA	14.50	14.50	EA	14.50
	ARRIVED AT SITE, EXAMINED SYSTEM, PROGRAMMED OVERFILL ALARM, TESTED AND LEFT IN WORKING ORDER 2/10/05 S/O 11674 SJC									
			REC'D FEB 28 2005		RECEIVED MAR 03 2004 FULL TIME A/P		500040 W - RO			
1. 25% RESTOCK FEE ON ANY RETURNED MERCHANDISE 2. NO RETURNS ACCEPTED WITHOUT PRIOR APPROVAL 3. THE CONDITIONS AS SET FORTH ON THE REVERSE SIDE HERON SHALL APPLY TO THIS SALE 4. 15 DAYS ALLOWED FOR CORE RETURN REFUNDS.			MERCHANDISE	MISCELLANEOUS	DISCOUNT		TAX	FREIGHT	TOTAL DUE	
			142.00	.00	.00		.00	.00	142.00	

PAST DUE ACCOUNTS SUBJECT TO 1 1/2% INTEREST CHARGE PER MONTH, 18% ANNUAL RATE

25% RESTOCK FEE ON ALL RETURNED MERCHANDISE

ORIGINAL

Foss Maritime Company

660 West Ewing Street Seattle, WA 98119-1587
Telephone: (206) 281-3800 Fax: (206) 281-4742

Check No. - 232698

Check Date - 03/10/05

INVOICE	DATE	DESCRIPTION	GROSS	DEDUCTIONS	AMOUNT PAID
98961	022405		142.00		142.00
			142.00		142.00

Bank of America
North Carolina

66-798
531

CHECK NO. 00232698



Foss Maritime Company
660 West Ewing St.
Seattle, WA 98119-1587
Telephone: (206) 281 - 3800
FAX: (206) 281 - 4742

336920

DATE	AMOUNT
03/10/05	\$*****142.00

VOID IF NOT CASHED IN 60 DAYS

PAY

ONE HUNDRED FORTY TWO AND 00/100 *****
TO THE ORDER OF:

MASCOTT EQUIPMENT
435 N.E. HANCOCK STREET
PORTLAND OR 97212

COPY NOT NEGOTIABLE

AUTHORIZED SIGNATURE

COLUMBIA SNAKE RIVER DIVISION POLLUTION INCIDENT REPORT

Person receiving report LJ STEPHENS Time 1500 Date 12/23/98
 ** Fill in as much information as is known at the time of receiving notification, complete additional information as obtained.

Person reporting incident(title/telephone no.) _____

Incident location FML Time 1500 Date 12/23

Vessel(s)/Facility involved FNL - BILGE LINE

Employee(s) involved NONE

Spill contained on deck No Appx Qty 5 gallons

Source (if known) BILGE LINE Product type SLOP

Is cargo continuing to escape from vessel/barge No

At what rate _____ From how many compartments _____

Direction of movement of spill DWN STREAM
wind 10- tides ebb current MODERATE

Potential threat to environment or public/any known sensitive areas in the vicinity of spill
UNKNOWN

Is there a fire or threat of fire No

Vessel condition/stable — Call 11SC6 1005 12-28-98 that there was

Containment or clean up efforts underway Foss ENVIRONMENTAL / SHOP CREW ^{Went for 32} ₁₄₂

✓ Foss containment boom deployed 20 ft Absorbents YES.

NOTIFICATIONS TO BE MADE IN ORDER OF PRIORITY

"Orphan" or "mystery" spills need to be reported to the local Coast Guard Only.

Response Duty Coordinator, pager #903-9799 Who _____ Time _____
(Ron Worley 452-1890, Comstock 360-687-3684)

The duty coordinator is responsible for ensuring that all Company & Customer notifications are completed.
Oil Spill response contractors - (MUST BE NOTIFIED WITHIN 30 MINUTES)

Foss Environmental 283-1150 YES Who PETE CAMPBELL / D HUNTER Time 1520

Alternate contractors: 1). Tidewater 289-4274 Who _____ Time _____
2). Riedel 800-334-0004 Who _____ Time _____

National Response Center - Case # 468694 Time 1515
phone #1-800-424-8802 Who MASON

US Coast Guard PDX 240-9370 Who P.O. Relf Time 1515 12/23

Oregon Response system 1-800-452-0311 Case # 98-3142 Time 1525

Washington Response System 1-800-258-5990 Case # NA

Response equipment dispatched Foss Environmental PETE CAMPBELL ⁰⁰⁹¹
MIKE SUTTON ⁰⁰⁹¹

Response personnel dispatched 1

Comments: _____

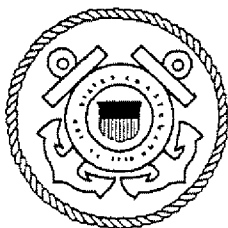
Fire, Medical and Police phone numbers are on

Confidential Business Information

LARRY J: ALL INCIDENTS
GLEN C: ALL INCIDENTS
DEAN HUNTER: ORIGINAL
PETE CAMPBELL ^{COPI}
MIKE SUTTON ^{COPI}
IRON WORLEY: TANK BGS-OCEAN BGS
JIM ANDERSON: UPRIVER INCIDENTS
MARK TROUTMAN: AS NEEDED
STEVE BRANCH: ALL INCIDENTS
BILL BURNETT: ALL INCIDENTS
KEN ANDERSON: CREW RELATED
WHIT O., TIM B: ALL INCIDENTS
USCG: GROUNDINGS ^{WILL}

P/RESO
 YES
 YES/FAV
 YES
 NO VAC
 NO VAC
 NO VAC
 YES
 YES
 NO VAC
 NO VAC
 NO VAC
 000144

00014473

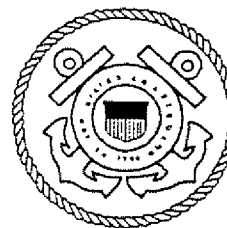


LETTER OF WARNING

United States Coast Guard

MARINE SAFETY OFFICE
RESPONSE BRANCH
(503)240-9379

6767 N. BASIN AVENUE
PORTLAND, OREGON
97217



On or about 0525 24 MAY 00, U. S. Coast Guard Marine Safety Office Portland, Oregon investigated a pollution incident involving your vessel facility at FOSS MARITIME TERM. It has been determined that you are responsible for this incident, associated removal costs and any damages resulting from your discharge of oil.

A discharge of oil into a navigable waterway of the United States is a violation of Section 311 of the Clean Water Act. A violation of the Act can result in a civil penalty of up to \$25,000 for each violation.

Under the Oil Spill Liability Act of 1990, the responsible party is liable for, among other things, removal costs and damages resulting from this incident. As long as the OSC determines that you are taking adequate actions in this matter, Federal removal action will usually be limited to monitoring the progress of your actions and providing guidance as necessary.

In consideration of this incident and the absence of recent similar violations, I am issuing this Letter of Warning in lieu of initiating an administrative penalty action. I currently do not intend to pursue this matter further. However, this incident may be considered or processed as a violation, if further information is uncovered. I urge your cooperation in preventing repetition of such violations.

A record of this incident will be maintained by the Coast Guard and this violation may be considered in the event future violations occur.

RESPONSIBLE PARTY

Name: Foss Maritime Vsl/Fac Name: Joseph T
Address: 9030 NW ST HELENS VIN/FIN: D 56 76 31
RD. PO BOX 83018 PORTLAND, Other Source Info: _____
OR 97231
Phone #: 503-286-0631 RP violation history None

DISCHARGE INFORMATION

A violation of 33 USC 1321(b)(3) has been determined in that, there was a discharge of an oil or designated hazardous substance, in a harmful quantity, into a navigable waterway or adjoining shoreline of the United States, from your vessel, onshore or offshore facility, and you are the responsible party.

Incident Description: ON 24 MAY 00 AT 0525 THERE WAS A DISCHARGE EST.
OF 2 CUPS OF GEAR OIL INTO THE WILLAMETTE RVR. FROM THE VSL
JOSEPH T. FES CONDUCTED CLUP SPILL WAS RESULT OF BILGE PUMP.

Issued by BMA Clinton Johnson Date/Time 06 JUN 00
Pollution Investigator
Received by _____ Date/Time _____

U.S. Department
of Transportation

United States
Coast Guard



NOTICE OF FEDERAL INTEREST FOR
AN OIL POLLUTION INCIDENT

COMMANDING OFFICER

COMMANDING OFFICER
MARINE SAFETY OFFICE/GROUP
6767 N. BASIN AVE.
PORTLAND, OR 97217

M/V JOSEPH T
FOSS MARITIME Comp.
9030 NW St. Helens Rd.
Portland, OR 97231

503-240-9370

Gentlemen:

On or about 0505 24 MAY 00, an oil pollution incident occurred or threatens to occur at FOSS MARITIME TERMINAL, WILLAMETTE RIVER. You may be financially responsible for that incident. Under Federal Statutes, the United States Government may take action to minimize or mitigate damage to the public health or welfare that is threatened or that may be caused by this incident.

Under the Oil Pollution Act of 1990, the responsible party is liable for, among other things, removal costs and damages resulting from this incident. The failure or refusal of the responsible party to provide all reasonable cooperation and assistance requested by the Federal On-Scene Coordinator (OSC) will eliminate any defense or entitlement to limited liability which otherwise might be available under the Act.

You are advised that your failure to properly carry out the removal of the discharge as ordered by the OSC or to comply with any administrative orders necessary to protect the public health and welfare, may subject you to additional penalties. For such failure, owners, operators, or persons in charge of the vessel or facility from which the oil is discharged are subject under the Federal Water Pollution Control Act (FWPCA), as amended, to a civil penalty of up to \$25,000 per day of violation or up to 3 times the costs incurred by the Oil Spill Liability Trust Fund. Should you require further information concerning this matter, please contact BM² Clinton Townsend at the above address and telephone number.

As long as the OSC determines that you are taking adequate actions in this matter, Federal removal action will usually be limited to monitoring the progress of your actions and providing guidance as necessary. Under the FWPCA, as amended, your response actions may be taken into account in determining the amount of any penalty assessed as a result of the discharge.

Sincerely,

BM² Clinton Neil Townsend

Received and Acknowledged: _____

Witness(es): _____

Person receiving report: Jim Evaman Time: 0522 Date: 5-29-00

Fill in as much information as is known at the time of receiving notification, complete additional info as obtained.

Person reporting incident (title/telephone #) _____

ALL INCIDENTS and/or "FOR YOUR INFORMATION EVENTS"

Nature of Event/Incident: oil Sheen in Slip

Location: FML Mile Post: _____ Time: _____ Date: _____

Vessel(s)/Facility Involved: ? "Joseph T."

Employee(s) Involved: ?

Brief Description of Incident/Event: While pulling into FML Slip Tag Jim Moore
Noticed Large Sheen in Slip

Weather Conditions: Calm (Had been Raining earlier)

Other Actions (drug test, etc): _____

POLLUTION INCIDENTS

Source of spill (if known): Joseph T. Product Type: Bilge Water

Spill contained on deck: _____ Quantity: UK gallons

Is pollutant continuing to escape from vessel/barge/source: No

At what rate: _____ From how many compartments: _____

Direction of movement of spill Slightly down wind Ø tides _____ current _____

Is there a fire or threat of fire or injury: NO

Containment/ clean up/ or repair efforts underway: _____

Vessel condition/ stable/ grounding: N/A

Foss containment boom deployed _____ ft. Absorbent Pads: _____

Response Equipment/Personnel Dispatched: _____

"MANDATORY" NOTIFICATIONS TO BE MADE - IN ORDER OF PRIORITY

"Orphan" or "Mystery" spills need to be reported to the local Coast Guard Only

1) Response Duty Coordinator: Who: _____ Time: _____

↓(MUST BE NOTIFIED WITHIN 30 MINUTES EVEN IF NOT REQUIRED TO RESPOND) ↓

- 2) Foss Environmental Service.....(503) 283-1150 Who: Mike Londas Time: 0530
(800) 337-7455
- Alternate contractors: 1) MFSA(503) 220-2055 Who: _____ Time: _____
2) MSRC(800) 645-7745 Who: _____ Time: _____
- 3) U.S. Coast Guard.....(503) 240-9300 Who: P.O. Bertelson Time: 0530
ext 307 240-9311
- 4) Customer: _____ Who: P.O. Townson Requested call Time: 0605 / 0620
- 5) National Response Center.....(800) 424-8802 Who: Reddy 53446 Time: 06010 AT C.G. Request
- 6) Oregon Response System.....(800) 452-0311 Who: _____ Time: _____
- 7) Washington Response System(800) 258-5990 Who: _____ Time: _____

Notify U.S.Coast Guard of
ALL Groundings/ Bridge Allisions(503) 240-9300 Who: _____ Time: _____

Name	Incident Type	Home	Cell	Pager	Time Notified
Larry Johnson	(all incidents)	(360)573-2009	(503) 781-1379	(503) 903-9793	0527 + 0535
Glen Comstock	(all incidents)	(360) 687-3684	(503) 789-9602	(503) 527-3165	
Steve Branch	(all incidents)	(360) 574-8863	(503) 789-6618	(503) 527-1809	0525 MSG / 0545
Bill Burnett	(all incidents)	(503) 625-2900	(503) 807-0491	(503) 870-5610	
Ron Worley	(all oil/ocean incidents)	(503) 452-1890		(503) 903-9799	
Mark Troutman	(all vessels/barges)	(503) 638-3308	(503) 703-8511	(503) 903-9786	
Jim Anderson	(all upriver incidents)	(503) 223-9838	(503) 784-8419		
Ken Anderson	(all boat personnel)	(503) 397-0417	(503) 789-2182	(503) 903-9803	
Whit Olsen	(oil,harbor,upriv & ocn)	(360) 892-7623	(503) 789-2623		
Tim Beyer	(ocean,upriver,wood)	(503) 244-3352	(503) 720-6999		
Dean Hunter	(ext 3857)	(206) 230-8669	(206) 406-0197	(206) 671-3508	
Tom Coburn	(ext 4821)	(425) 430-8870	(206) 914-1219		
John Crawford	(ext 3781)	Must Be Faxed On All Spills - fax: (206) 270-4810	(206) 671-3484		0001- RS

MANDATORY NOTIFICATION -- CALL DOWN LIST

TUG / BARGE - <SPILLER>

<NOTIFIES>

VVVV

FOSS CUSTOMER SERVICE CENTER

(24 hour/dispatch)

SEATTLE, WA.....(206) 281-3810

PORTLAND, OR.....(503) 286-0631

SAN FRANCISCO, CA(415) 433-3677

LA/LONG BEACH, CA.....(562) 435-0171

<NOTIFIES>

VV

(#1) Foss Management

<QUALIFIED INDIVIDUAL>

(List Maintained Separately, Section 1, 6)

(#4) National Response Center

(USCG / EPA)

(800) 424-8802 PR)2-2_ 267-2675

V AND V

V AND V

(#2) APPROPRIATE USCG COTP

Western Alaska/Anchorage, AK

(907) 271-6700

Prince William Sound/Valdez, AK

(907) 835-4791

Southeast Alaska/Juneau, AK

(907) 463-2000 / 2450

Puget Sound / Seattle, WA

(206) 217-26332

Portland, Oregon

(503) 240-9300 / 9338

Honolulu, Hawaii

(808) 522-8260

San Francisco/Alameda CA

(510) 437-3073

LA/ Long Beach, CA

(562) 980-444 / 4425

San Diego, CA

(619) 683-6505

(#5) APPROPRIATE STATE / CANADA

Alaska - DEC

Southeast only: (907) 465-5340

Central/West only: (907) 269-7500

North only (R-Dog): (907) 451-2121

If No Answer, call 24 hours to:

(800) 478-9300 or (907) 428-7200

California - OES/OSPR

(800) 852-7550 or (916) 262-1621

Canada - / CCG/WR

(604) 666-6011

Hawaii - HEER

(808) 586-4249 or (808) 247-2191

Idaho - ECC / BOHM

(800) 632-8000 or (208) 334-4570

Oregon - OEM/DEQ

(800) 452-0311 or (503) 378-6377

Washington - EMD / DOE

(800) 258-5990 or (360) 459-9191

V AND V

V AND V

(#3) CUSTOMER/S

(List Maintained Separately)

(#6) OTHERS, AS DIRECTED

(Or Appropriate)

> AND >

Within 30 Minutes of discovery of a discharge or substantial threat of discharge the Qualified Individual (QI) must notify/mobilize the identified response resource for the appropriate geographic region. 33 CFR 155.1050(h) . As appropriate, the Q.I. will also activate our spill response management team (ICS) and any necessary rescue/salvage/lightering resources.

For mystery spills, ensure local USCG COTP notified (only action required).

Confidential Business Information

00014498

REPORT OF MARINE ACCIDENT, INJURY OR DEATH

Approved OMB No. 2115-0003
RCS No. G-MMI 2115-003
UNIT CASE NUMBER

SECTION I. GENERAL INFORMATION

1. Name of Vessel or Facility <u>Joe T</u>		2. Official No.		3. Nationality		4. Call Sign		5. USCG Certificate of Inspection issued at	
6. Type (Towing, Freight, Fish, Drill, etc.)		7. Length		8. Gross Tons		9. Year Built		10. Propulsion (Steam, diesel, gas, turbine, ...)	
11. Hull Material (Steel, Wood, ...)		12. Draft (ft - in.) FWD. AFT.		13. If Vessel Classed, By Whom: (ABS, LLOYDS, DNV, BV, etc.)		14. Date (of occurrence)		15. TIME Local	
16. Location (See Instruction No. 10A)						17. Estimated Loss or Damage TO:			
18. Name, Address & Telephone No. of Operating Co. <u>Foss Maritime</u> <u>9030 NW St. Helens Road</u> <u>Portland, OR 97231</u>						VESSEL \$			
						CARGO \$			
						OTHER \$			
19. Name of Master or Person in Charge <u>Ray Free</u>		USCG License <input type="checkbox"/> YES <input type="checkbox"/> NO		20. Name of Pilot		USCG License <input type="checkbox"/> YES <input type="checkbox"/> NO		State License <input type="checkbox"/> YES <input type="checkbox"/> NO	
19a. Street Address (City, State, Zip Code)		19b. Telephone Number ()		20a. Street Address (City, State, Zip Code)		20b. Telephone Number ()			

21. Casualty Elements (Check as many as needed and explain in Block 44.)

NO. OF PERSONS ON BOARD _____ <input type="checkbox"/> DEATH- HOW MANY? _____ <input type="checkbox"/> MISSING- HOW MANY? _____ <input type="checkbox"/> INJURED- HOW MANY? _____ <input type="checkbox"/> HAZARDOUS MATERIAL RELEASED OR INVOLVED (Identify Substance and amount in Block 44.) <input checked="" type="checkbox"/> OIL SPILL-ESTIMATE AMOUNT: <u>One Cup 40 wt. Lubed Oil</u> <input type="checkbox"/> CARGO CONTAINER LOST/DAMAGED <input type="checkbox"/> COLLISION (Identify other vessel or object in Block 44.) <input type="checkbox"/> GROUNDING <input type="checkbox"/> WAKE DAMAGE	<input type="checkbox"/> FLOODING; SWAMPING WITHOUT SINKING <input type="checkbox"/> CAPSIZING (with or without sinking) <input type="checkbox"/> FOUNDERING OR SINKING <input type="checkbox"/> HEAVY WEATHER DAMAGE <input type="checkbox"/> FIRE <input type="checkbox"/> EXPLOSION <input type="checkbox"/> COMMERCIAL DIVING CASUALTY <input type="checkbox"/> ICE DAMAGE <input type="checkbox"/> DAMAGE TO AIDS TO NAVIGATION <input type="checkbox"/> STEERING FAILURE <input type="checkbox"/> MACHINERY OR EQUIPMENT FAILURE <input type="checkbox"/> ELECTRICAL FAILURE <input type="checkbox"/> STRUCTURAL FAILURE	<input type="checkbox"/> FIREFIGHTING OR EMERGENCY EQUIPMENT FAILED OR INADEQUATE (Describe in Block 44.) <input type="checkbox"/> LIFESAVING EQUIPMENT FAILED OR INADEQUATE (Describe in Block 44.) <input type="checkbox"/> BLOW OUT (Petroleum exploration/production) <input type="checkbox"/> ALCOHOL INVOLVEMENT (Describe in Block 44.) <input type="checkbox"/> DRUG INVOLVEMENT (Describe in Block 44.) <input type="checkbox"/> OTHER (Specify) _____
--	--	--

22. Conditions

A. Sea or River Conditions (wave height, river stage, etc.)	B. WEATHER	C. TIME	D. VISIBILITY	E. DISTANCE (miles) _____ (of visibility)
	<input type="checkbox"/> CLEAR <input type="checkbox"/> RAIN <input type="checkbox"/> SNOW <input type="checkbox"/> FOG <input type="checkbox"/> OTHER (Specify) _____	<input type="checkbox"/> DAYLIGHT <input type="checkbox"/> TWILIGHT <input type="checkbox"/> NIGHT	<input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR	F. AIR TEMPERATURE (F) _____ G. WIND SPEED & DIRECTION _____ H. CURRENT SPEED & DIRECTION _____

23. Navigation Information

<input checked="" type="checkbox"/> MOORED, DOCKED OR FIXED <input type="checkbox"/> ANCHORED <input type="checkbox"/> UNDERWAY OR DRIFTING	SPEED AND COURSE _____	24. Last Port Where Bound _____	24a. Time and Date of Departure _____
--	------------------------	---------------------------------	---------------------------------------

25. FOR TOWING ONLY	25a. NUMBER OF VESSELS TOWED	Empty	Loaded	Total	25b. TOTAL H.P. OF TOWING UNITS	25c. MAXIMUM SIZE OF TOW WITH TOW-BOAT(S)	Length	Width	25d. (Describe in Block 44.) <input type="checkbox"/> PUSHING AHEAD <input type="checkbox"/> TOWING ASTERN <input type="checkbox"/> TOWING ALONGSIDE <input type="checkbox"/> MORE THAN ONE TOW-BOAT ON TOW

SECTION II. BARGE INFORMATION

26. Name		26a. Official Number		26b. Type	26c. Length	26d. Gross Tons	26e. USCG Certificate of Inspection Issued at:
26f. Year Built	26g. <input type="checkbox"/> SINGLE SKIN <input type="checkbox"/> DOUBLE SKIN	26h. Draft FWD AFT	26i. Operating Company				
26j. Damage Amount BARGE \$ _____ CARGO \$ _____ OTHER \$ _____				26k. Describe Damage to Barge			

SECTION III. PERSONNEL ACCIDENT INFORMATION

27. Person Involved <input type="checkbox"/> MALE or <input type="checkbox"/> FEMALE <input type="checkbox"/> DEAD <input type="checkbox"/> MISSING <input type="checkbox"/> INJURED		27a. Name (Last, First, Middle Name)		27c. Status <input type="checkbox"/> CREW <input type="checkbox"/> PASSENGER <input type="checkbox"/> OTHER (Specify)	
		27b. Address (City, State, Zip Code)			
28. Birth Date	29. Telephone No. ()	30. Job Position		31. (Check here if off duty) <input type="checkbox"/>	
32. Employer (If different from Block 18., fill in Name, Address, Telephone No.)					
33. Person's Time		YEAR(S)	MONTH(S)	34. Industry of Employer (Towing, Fishing, Shipping, Crew Supply, Drilling, etc.)	
A. IN THIS INDUSTRY -					
B. WITH THIS COMPANY -					
C. IN PRESENT JOB OR POSITION -				35. Was the Injured Person Incapacitated 72 Hours or More? <input type="checkbox"/> YES <input type="checkbox"/> NO	
D. ON PRESENT VESSEL/FACILITY -				36. Date of Death	
E. HOURS ON DUTY WHEN ACCIDENT OCCURRED -					
37. Activity of Person at Time of Accident <i>At Home Asleep</i>					
38. Specific Location of Accident on Vessel/Facility <i>EML Dock Area</i>					
39. Type of Accident (Fall, Caught between, etc.)			40. Resulting Injury (Cut, Bruise, Fracture, Burn, etc.)		
41. Part of Body Injured			42. Equipment Involved in Accident		
43. Specific Object, Part of the Equipment in Block 42., or Substance (Chemical, Solvent, etc.) that directly produced the injury.					

SECTION IV. DESCRIPTION OF CASUALTY

44. Describe how accident occurred, damage, information on alcohol/drug involvement and recommendations for corrective safety measures. (See instructions and attach additional sheets if necessary).

Secured the JOC T 0230 May 29th 2000. Approximately 05:20 5-29-00 a spill was discovered in the Foss Maritime Lincon Dock area around the JOC T. Apparently oil + water was pumped out off the Port Shaft alley. I was notified 5-30-00 13:00 hrs.

45. Witness (Name, Address, Telephone No.)

46. Witness (Name Address, Telephone No.)

SECTION V. PERSON MAKING THIS REPORT

47. Name (PRINT) (Last, First, Middle) <i>Ivanoff Sam W</i>	47b. Address (City, State, Zip Code) <i>256 Florence Astoria OR 97103</i>	47c. Title <i>Deckhand</i>
47a. Signature <i>[Signature]</i>		47d. Telephone No. <i>(503) 338-7497</i>
		47e. Date <i>6-7-00</i>

FOR COAST GUARD USE ONLY

REPORTING OFFICE:

APPARENT CAUSE

CASUALTY CODE A B C

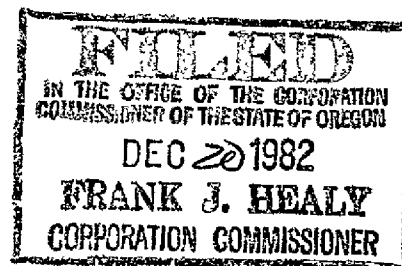
INVESTIGATOR (Name)

DATE

APPROVED BY (Name)

DATE

ARTICLES OF MERGER
OF
DOMESTIC & FOREIGN CORPORATIONS



The undersigned corporation, in accordance with the General Corporation Law of the State of Delaware and pursuant to Section 57.470 of the Oregon Revised Statutes hereby executes the following Articles of Merger:

ARTICLE I.
PLAN OF MERGER

1.1 Knappton Terminals, Inc., an Oregon corporation, shall be merged into Knappton Corporation, a Delaware corporation, with Knappton Corporation being the surviving corporation.

1.2 The Plan of Merger between Knappton Terminals, Inc. and Knappton Corporation is attached hereto and incorporated herein by this reference.

ARTICLE II.
OUTSTANDING SHARES

2.1 The number of Outstanding shares of each class of stock of the subsidiary corporation, Knappton Terminals, Inc. and the number of such shares of stock owned by the surviving corporation, Knappton Corporation are:

<u>Name of Corporation</u>	<u>Total Shares Outstanding</u>	<u>Total Shares Entitled to vote</u>	<u>Class of Stock</u>	<u>Shares Owned by Knappton Corporation</u>
Knappton Terminals Inc.	1,000	1,000	Common	1,000

ARTICLE III.
NOTICE

3.1 Knappton Corporation as sole shareholder of Knappton Terminals, Inc. has waived the statutory requirement that a copy of the Plan of Merger be mailed to it and has agreed that the execution of the Plan of Merger shall constitute mailed notice of the Plan of Merger to the Shareholders of Knappton Terminals, Inc. The Plan of Merger was executed on the 6th day of December, 1982.

ARTICLE IV.
COUNTERPARTS

4.1 Multiple counterparts hereof shall be executed and each such executed counterpart shall be deemed to be an original instrument. EXECUTED and dated this 6th day of December, 1982.

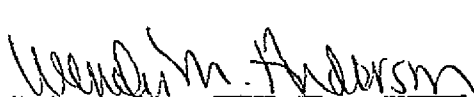
KNAPPTON TERMINALS, INC.

By 
PETER J. BRIX, PRESIDENT

By 
ROBERT A. HINDMAN, SECRETARY

KNAPPTON CORPORATION

By 
PETER J. BRIX, PRESIDENT

By 
WENDY M. ANDERSON, SECRETARY

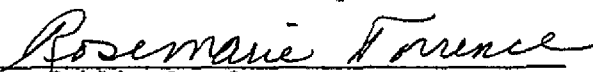
STATE OF OREGON)

County of Multnomah) ss.

December 6, 1982

Personally appeared PETER J. BRIX who, being duly sworn did say that he is the President of KNAPPTON CORPORATION and that said instrument was signed in behalf of said KNAPPTON CORPORATION by authority of its Board of Directors; and he acknowledged the foregoing instrument to be its voluntary act and deed.

Before me:


Notary Public for Oregon
My Commission Expires 3-19-84


STATE OF OREGON)

County of Multnomah) ss.

December 6, 1982

Personally appeared Robert A. Hindman who, being duly sworn did say that he is the Secretary of KNAPPTON CORPORATION and that said instrument was signed in behalf of said Directors; and he acknowledged the foregoing instrument to be its voluntary act and deed.

Before me:


Notary Public for Oregon
My Commission Expires 3-19-84

STATE OF OREGON)

County of Multnomah

SS.

December 6, 1982

Personally appeared PETER J. BRIX who, being duly sworn did say that he is the President of KNAPPTON TERMINALS, INC. and that said instrument was signed in behalf of said KNAPPTON TERMINALS, INC. by authority of its Board of Directors; and he acknowledged the foregoing instrument to be its voluntary act and deed.

Before me:

Rosemarie Torrence
Notary Public for Oregon
My Commission Expires: 3-19-84

STATE OF OREGON)

SS.

December 6, 1982

Personally appeared WENDY M. ANDERSON who being duly sworn did say that she is the Secretary of KNAPPTON TERMINALS, INC. and that said instrument was signed in behalf of said Directors; and she acknowledged the foregoing instrument to be its voluntary act and deed.

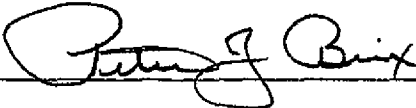

Before me:

Janice L Smith
Notary Public for Oregon
My Commission Expires: 2/9/84

We, the undersigned, declare under the penalties of perjury that we have examined the foregoing and to the best of our knowledge and belief it is true, correct and complete.

KNAPPTON TERMINALS

Name of Corporation

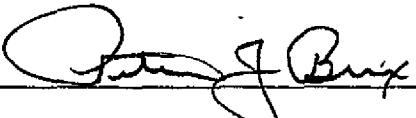
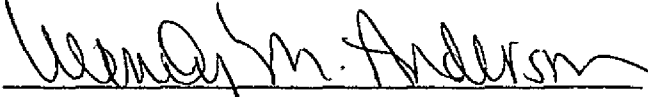
by  and 
Its President Its Secretary

Dated December 22, 1982

We, the undersigned, declare under the penalties of perjury that we have examined the foregoing and to the best of our knowledge and belief it is true, correct and complete.

KNAPPTON CORPORATION

Name of Corporation

by  and 
Its President Its Secretary

Dated December 22, 1982

**RIEDEL ENVIRONMENTAL SERVICES INC.
CONTRACT FOR CONSULTING SERVICES**

This Consulting Agreement dated the 7th day of November, 1991 is between Riedel Environmental Services Inc. (RES) and Brix Maritime Co. (Brix). Both RES (Consultant) and Brix are jointly referred to herein as "the Parties".

In consideration of payments to be made to Consultant and services to be provided by Consultant, the Parties agree as follows:

1. SCOPE OF WORK

RES agrees to provide technical consulting services to Brix relating to the development of an "umbrella" oil spill contingency plan for ten (10) Brix vessels operated on the Lower Columbia River (Portland to Astoria) and two (2) Brix vessels operated in Port Angeles, Washington, as further specified in Exhibits A and B (Proposal letters from RES to Brix dated September 26, 1991 and October 25, 1991) attached and incorporated into this Agreement. RES will prepare and submit two (2) drafts of the "umbrella" oil spill contingency plans to the Oregon Department of Environmental Quality and Washington Office of Marine Safety, as appropriate. RES will produce Draft #1 of the "umbrella" oil spill contingency plan and submit this plan to the aforementioned reviewing agencies (as appropriate) by February 29, 1992. RES cannot guarantee approval of the subject plans, but will put forth its best efforts to prepare and submit plans in accordance with currently established guidelines and requirements.

2. TIME

This Agreement is effective from the Agreement date of November 7, 1991 until May 31, 1992 and subject to renewal by mutual agreement of the Parties.

3. COMPENSATION

The compensation to be paid to Consultant for work performed per this Agreement shall be a firm, fixed price of \$12,000.

4. PAYMENT PROCEDURES

Consultant shall submit, on a monthly basis, invoices to Brix together with such supporting documentation as Brix may require to support requests for payment and reimbursement of expenses pursuant to this Agreement.

5. CONTRACTUAL WARRANTY, LIMITS OF LIABILITY AND INDEMNITY

5.1 Contractual Standard of Care. RES warrants that its provision of all services under this Agreement will conform to the standards of care, skill and diligence normally observed by professionals in the provision of similar services as of the time RES provides such services. THIS WARRANTY IS IN LIEU OF, AND EXCLUDES, ALL OTHER WARRANTIES, STANDARDS AND GUARANTEES, WHETHER EXPRESSED OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OF ANY EQUIPMENT, MACHINERY, PROCESSOR SYSTEM EMPLOYED OR PROVIDED BY RES. Brix's sole remedy and RES's sole liability for breach of the warranty set forth in this Section shall be the reperformance of the services in question to the extent necessary to cure the breach. Such remedy will be available to Brix only if Brix reports the breach to RES within a reasonable period of time after discovery of the breach and in any event not later than one year after completion of the service in question or termination of this

Agreement, whichever is earlier. In no event will RES's obligation to reperform services exceed in cost \$1,000,000 or the compensation actually paid to RES by Brix pursuant to this Agreement, whichever is less.

5.2 Limits of Liability.

5.2.1 Consequential Damages. In no event shall RES be liable to Brix (or any person claiming through Brix) in connection with this Agreement or the services provided under this Agreement for lost profits or any other consequential or incidental damages.

5.3 Liens; Indemnification of Brix. RES shall pay as due all claims for labor, materials and services resulting from RES's performance of this Agreement and shall keep Brix's property free from any liens other than liens created by Brix. RES shall indemnify and hold harmless Brix from and against any and all liability, losses, claims, demands, damages, suits, costs, expenses (including attorneys' fees at trial and on appeal or petition for review) and causes of action arising out of any lien placed upon Brix's property as a result of RES's performance of this Agreement.

5.4 Overall Limitation. RES' total liability to Brix pursuant to this Agreement howsoever arising out of or in connection with the Services performed hereunder, except for RES' liability to reperform its Services pursuant to paragraph 5.1 hereof, shall not exceed the lesser of (a) Brix's actual damages for which RES is liable hereunder; or (b) the applicable insurance proceeds paid in RES' behalf by carriers of the policies specified in paragraph 6 hereof.

6. INSURANCE

RES shall at its own cost and expense procure and keep in force and effect the insurance listed below with insurance carrier(s) acceptable to Customer. Before commencing any work, RES shall furnish Brix with Certificates of Insurance attested by a duly authorized representative of the insurance carrier(s) evidencing that the insurance required hereunder is in force and effect and that such insurance will not be canceled or materially changed without giving to Brix at least 30 days prior written notice. In the event RES fails to furnish Brix with acceptable Certificates of Insurance before the time named in this Agreement for commencing work, Brix shall have the right to terminate this Agreement.

(a) Worker's Compensation and Employer's Liability Insurance:

RES and all subcontractors retained by or through RES, and all their employees, workmen, agents, and servants shall comply with all requirements of the worker's or workmen's compensation laws of the state or states or other governmental authority in which RES or any subcontractor retained by or through RES is performing any work hereunder. In addition, RES shall carry Employer's Liability Insurance covering all operations and work hereunder in an amount not less than \$1,000,000 per occurrence.

(b) General Liability Insurance and Automobile Liability:

Insurance to protect against any and all claims for damages to persons or property which may arise out of the operations under this Agreement: (1) General Liability insurance shall be on an occurrence form and shall include coverage for acts of Contractor, Subcontractors, and anyone directly or indirectly employed by either of them. Such insurance shall include blanket contractual coverage, products and completed operations, and broad form property damage and all other standard coverages usually afforded by a commercial general liability policy. The amount shall be \$1,000,000 combined single limit for bodily injury and property damage. Such insurance shall name Customer as additional insured and shall be primary to any and all other insurance of Brix; (2) Automobile Liability insurance on all motor vehicles

owned, hired, or non-owned, which may be used or connected with any of the work hereunder. The amount shall be \$1,000,000 combined single limit for bodily injury and property damage.

7. PATENTS/TRADE SECRETS

Any and all invention(s) (whether or not deemed patentable), improvements, discoveries, formulas and/or processes learned or invented by the Consultant while in the process of performing this Agreement shall be the sole and absolute property of Consultant and Consultant shall be the sole and absolute owner of all patent, patentable and all other rights in connection therewith, without additional fees, royalties or other payments of any nature to be made by Consultant.

Consultant shall, at all times, during and for a period of nine months after the termination of this Agreement, any extensions, modifications and/or amendments thereto, hold inviolate and keep secret and shall not disclose by any method to any entity or person any confidential information, knowledge and/or documents of whatever form, type or nature relating to materials, processes, procedures, inventions, discoveries, performances or any trade secrets that are made known to Consultant during this contract, any extension, renewal or modification thereof.

8. COMPLIANCE WITH REGULATION

Consultant shall, at his sole cost and expense, comply with all laws, ordinances, and regulations. Consultant shall procure permits, licenses, insurance coverage (workers' compensation or otherwise) necessary or required by any governmental authority to do or perform his obligations hereunder. Consultant shall, upon request by Brix, provide Brix with evidence of compliance with such laws, rules and/or regulations.

9. CONFLICTS

Consultant covenants that he has no outstanding agreements, covenants or other restrictions that would prohibit him from entering into this Agreement and performing it.

10. ASSIGNMENT

This is a special consulting contract and it may not be assigned to or performed by any person and/or entity other than Consultant without the prior written consent of Brix.

11. ATTORNEY FEES

If it is necessary for either party to institute any proceeding, action or suit to enforce any rights under this Agreement, the party not prevailing in such proceeding, action or suit agrees to apply the prevailing party's costs and disbursements and such sums as the Judge of the court may adjudge reasonable as attorney's fees in any such proceeding, action or suit or in any appeal thereon.

12. APPLICABLE LAW

This Agreement shall be construed under the laws of the State of Oregon.

Riedel Environmental Services Inc.

By: *Keith C. Robert*

Title: *NW Regional VP*

Brix Maritime Co

By: *[Signature]*

Title: *Se. V.P. - Finance*

CONSULTING SERVICES CONTRACT

EXHIBIT A



RIEDEL ENVIRONMENTAL
SERVICES INC

Northwest/Alaska Region:
P.O. Box 03096
Portland, Oregon 97203-0096
(503) 286-4656
FAX (503) 283-9703

September 26, 1991

Ms. Chris Haley
Manager, Petroleum Barging
Brix Maritime Co.
9030 N.W. St. Helens Rd.
Portland, Oregon 97283

Dear Ms. Haley:

In response to your request that Riedel Environmental Services Inc. (RES) provide you with a proposal for developing an oil spill contingency plan for two Brix Maritime vessels at your Port Angeles, Washington operation, we at Riedel have reviewed whatever appropriate guidelines are currently available (i.e. WAC 317-10-010 through 098) for the production of such a plan and have developed a proposal for the production of the plan. The final production and approval of the plan is dependent upon the release of final standards for the preparation of vessel contingency plans by the Washington State Office of Marine Safety. This release probably will not be forthcoming prior to November 5, 1991 (the date proposed for adoption of Chapter 317-10 WAC). In the interim, we have assumed that final standards will closely parallel the proposed standards set forth in WAC 317-10-050. To wit, the plan format and content would closely follow the ensuing outline for plan content requirements:

Plan Content Requirements (WAC 317-10-050)

1. Submittal Agreement
 - a. Party name, address, phone number
 - b. Owner/operator acceptance (w/ signature)
 - c. Commits implementation of plan by owner
 - d. Vessel name; name, location and address of owner/operator; official identification code or call sign; country of registration; common ports of call in Washington; type of oil(s) handled; oil volume capacity; expected period of operation; passenger capacity (if applicable).
2. Amendment Log Sheet
3. Table of Contents

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4. **Description of Plan Purpose and Scope**
 - a. **Geographic area of plan**
 - b. **Covered vessel operations**
 - c. **Size of worst case spill from covered vessel**
5. **Procedures and schedules for plan updates**
6. **Strategy to ensure plan utilization**
7. **Description of spill response system**
8.
 - a. **Response contractor information; letter of commitment**
 - b. **Oil spill cooperative information**
 - c. **Primary response contractor approval by agency**
9. **Description of plan's relationship to other agency plans**
10. **Procedures to detect and document presence/size of spill**
11. **Description of notification procedures**
 - a. **Notification call-down list**
 - I. **Response contractor name, title, phone number**
 - II. **Agency contact list with phone numbers**
 - III. **Outline priority for immediate notification**
 - b. **Identify central reporting office to initiate call-down**
 - c. **Utilize system to categorize spill type and severity**
12. **Description of spill response personnel (owner and contractor)**
 - a. **Job description for each spill response position**
 - b. **Number of personnel available**
 - c. **Arrangements for prepositioning response personnel**
 - d. **Frequency of response personnel training**
 - e. **Procedures for training volunteers**

13.
 - a. Spill equipment type, quantity, age, location, maintenance schedule and availability
 - b. Above equipment which is not exclusively committed to plan
 - c. Equipment information: make, model, capacity, design limits applicable
 - d. Maximum oil recovery per 24 hour period
 - e. Realistic capabilities - agency to apply efficiency multipliers
 - f. Arrangement for prepositioning equipment
14. Description of spill communication system
 - a. Communication procedures
 - b. Communication function (e.g. ground-to-air) of each channel
 - c. Maximum geographic range of each channel
15. Description of process to establish site spill response operations
 - a. Central command post
 - b. Central communications post
 - c. Equipment and personnel staging areas
16.
 - a. Flowchart describing stages of spill response and cleanup
 - b. Description of spill response operations in checklist form
17.
 - a. List agencies responsible for peripheral activities
 - I. Procedures to control fire and explosion; rescue operations
 - II. Procedures to control ground traffic
 - III. Procedures to manage site access
 - b. Description of plan holder's role in these emergency activities
18. Description of equipment and procedures to minimize magnitude of spill
 - a. Tank vessel damage control procedures
 - I. Methods and onboard equipment to:
 - A. Achieve vessel stability
 - B. Prevent further vessel damage
 - C. Slow or stop leaks
 - D. Achieve emergency shutdown during oil transfer

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24.
 - a. Description of site criteria and methods for interim debris storage
 - b. Plan for expediting interim storage approval (as needed)
 - c. Description of methods and sites for permanent waste disposal
 - d. Storage/disposal methods to accommodate volume collected
 - e. Storage/disposal methods to comply with agency rules
25. Description of procedures to protect health and safety of personnel; training
26. Explanation of past-spill review procedures
27.
 - a. Description of schedule/type of spill drills
 - b. Tests of internal call-down procedures (every 90 days)
28. Description of measures to reduce spill potential (tank vessels)
 - a. Type/frequency of training to reduce operational risk
 - b. Methods to ensure equipment integrity
 - c. Methods to reduce spills during transfer operations
 - d. Key measures to reduce risks during navigation
29. List spill risk variables within geographic area
 - a. Types, physical properties and amounts of oil handled
 - b. Description/diagram indicating cargo, fuel and ballast tanks and piping, power plants and other oil storage/transfer sites
 - c. Description of operations with high spill potential; key areas posing navigation risk
30. Demonstrate access to index of environmental variables
 - a. Natural resources-aquatic habitats, breeding sites, etc.
 - b. Public resources - beaches, water intake, marinas, etc.
 - c. Seasonal hydrographic and climatic conditions
 - d. Physical geographic features

31. Demonstrate access to index of logistical resources
 - a. Facilities for fire services, medical services, accommodations
 - b. Shoreline access areas; boat launches

32.
 - a. Description (in detail) of step-by-step response scenarios
 - I. Small chronic oil spill (<500 gal.)
 - II. Worst case spill (as described pursuant to subsection 4c)
 - b. Scenario description to include
 - I. Circumstances of spill: size, type, location, conditions
 - II. Estimate of oil movement during first 72 hours
 - III. Estimate of response time/percent recovery
 - c. Multiple vessel plan - describe simultaneous spill responses

33. Glossary of technical terms and abbreviations

We estimate that the production of the plan would require a total of 96 professional labor hours and 48 technical and clerical labor hours to meet the current plan content requirements as set forth in WAC 317-10-050. A breakdown of Riedel's proposal activities follows:

- A. Meetings with Brix Maritime and Washington Office of Marine Safety: 16 professional labor hours.
- B. Contingency plan data collection, writing and production: 80 professional labor hours; 48 technical/clerical labor hours.
- C. Subtotal, labor for plan production: \$6,240

(96) man-hours (50) \$/Hr. =	\$4,800
(48) man-hours (30) \$/Hr. =	<u>1,440</u>
	\$6,240
- D. Subtotal, document production materials & graphics: \$180
- E. Subtotal, miscellaneous expenses (mileage, etc.) \$80
- F. Total estimated spill contingency plan production price (C + D + E): \$6,500

While Riedel cannot guarantee approval of such a plan, Riedel will put forth its best efforts to prepare and submit two (2) drafts of a vessel oil spill contingency plan for review and approval by Washington's Office of Marine Safety, using guidelines available in Chapter 317-10 WAC. We assume that a single plan will be submitted for Brix's 2 Port Angeles vessels (assumes same vessel type) pursuant to WAC 317-10-060 (4) (d). We also assume that Brix can expeditiously provide Riedel with nominal necessary data including:

<u>Description</u>	<u>Plan Content Outline Reference</u>
* Vessel Data	1 d
* Plan Scope	4 a-c
* Response Personnel	12 a-e
* Spill Equipment	13 a-f
* Communication Equipment	14 a-c
* Response Operations ,	15 a-c
* Brix Response Role	17 b
* Onboard Spill Equipment	18 a-b
* Personnel Training	25
* Spill Drills	27 a-b
* Spill Reduction Measures	28 a-b, d
* Risk Variables	29 a-c

Obviously, the majority of the above data is critical to Riedel's ability to provide a responsive plan.

Thank you for your consideration of our proposal. If you have any questions or require clarifications, please contact me at 286-4656 ext. 662.

Sincerely,



Richard Heymann
Manager, Business Development

DH:tp

EXHIBIT B



RIEDEL ENVIRONMENTAL
SERVICES, INC.

Portland Region:
P.O. Box 03096
Portland, Oregon 97203-0096
(503) 286-4656
FAX: (503) 283-9703

October 25, 1991

Ms. Chris Haley
Manager, Petroleum Barging
Brix Maritime Co.
9030 N.W. St. Helens Rd.
Portland, Oregon 97283

Dear Ms. Haley:

In response to your request that Riedel Environmental Services Inc. (RES) provide you with a proposal for developing an oil spill contingency plan for ten (10) Brix Maritime vessels operated on the "lower" Columbia River (Portland to Astoria), we at Riedel would propose to prepare the subject plan in accordance with WAC 317-10-010 through 098 requirements (as outlined in our September 26, 1991 letter for a similar plan for your Port Angeles operations). Since Oregon's requirements for preparation of vessel oil spill contingency plans are not yet available, we would use Washington's (WAC) guidelines referenced above and follow guidance set forth in Oregon's Senate Bill 242 for the preparation of the Columbia River vessel oil spill contingency plan.

Because much of the boilerplate developed for the Port Angeles plan could be utilized in the Columbia River plans, we can offer Brix Maritime a package price (for production of both the Port Angeles and Columbia River vessel oil spill contingency plans) of \$12,000 for production of both plans.

Riedel cannot guarantee approval of these plans, but will prepare and submit two (2) drafts (original and revised) to the Oregon Department of Environmental Quality and Washington Office of Marine Safety, as appropriate. The proposed price assumes coverage for ten (10) Brix vessels on the lower Columbia River and two (2) Brix vessels (of same vessel type) in Port Angeles. We also assume that Brix can expeditiously provide Riedel with the nominal necessary data specified in our September 26, 1991 proposal to Brix.

DH-010

Chris Haley
October 25, 1991
Page 2

Thank you for your consideration of our proposal. If you have any questions or require clarifications, please contact me at 286-4656 ext. 662.

Sincerely,

A handwritten signature in dark ink, appearing to read "Rich Heymann", with a long horizontal flourish extending to the right.

Richard Heymann
Regional Manager, Business Development

RH:tp